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The Purbis Oration

ON

ABDOMINAL PREGNANCY IN WOMEN, CATS, DOGS, AND RABBITS.

Delivered before the West Kent Medico-Chirurgical Society on Dec. 2nd, 1904,

BY JOHN BLAND-SUTTON, F.R.C.S. ENG.,
SURGEON TO THE CHELSEA HOSPITAL FOR WOMEN, ETC.

MR. PRESIDENT AND GENTLEMEN,—In spite of the great increase in our knowledge of the later stages of extra-uterine gestation, and more especially in those conditions where the fœtus survives to or near term, there is still in the minds of some writers a lingering belief in the existence of a primary abdominal pregnancy; by this I mean that an oösperm (fertilised ovum) may escape from the Fallopian tube and engraft itself on the omentum, intestines, or other abdominal organ and develop into a fœtus. The accurate work of Dr. D. Berry Hart and Professor J. W. Taylor has shown how many of these extra-uterine fœtuses find their way through the walls of the Fallopian tubes into the abdomen, but there are a few puzzling cases still requiring elucidation which will receive consideration in this lecture.

Among these anomalous varieties of gestation it is my intention to draw particular attention to a case of very great importance, interest, and rarity described by Leopold in 1896. The chief facts are these. A woman advanced in pregnancy to the fourth month fell downstairs and injured herself in the abdomen. At the time she should be delivered an examination led to the diagnosis of an extra-uterine gestation. Cœliotomy was proposed and carried out. A fœtus of about the fourth month of gestation enveloped in a thin (amniotic) sac occupied the abdomen and its umbilical cord passed through an opening in the posterior wall of the uterus. Subsequently the uterus, which also contained the placenta, was removed with success. The obvious interpretation to place on these facts is this. The uterus sustained injury when the woman fell downstairs and the fœtus in its amnion was slowly extruded into the abdomen through a rent in the posterior uterine wall. The full history of the case, with illustration, will be found in the *Archiv für Geburtshülfe und Gynäkologie*, 1896, Band lii., S. 376. This condition of things has conveniently been described as utero-abdominal pregnancy.

The chief interest of Leopold's valuable case lies in the fact that although utero-abdominal pregnancy is extremely rare in women it is the common form of extra-uterine pregnancy in mammals with long two-horned uteri. In 1889, when engaged in collecting the material for my book on "Diseases of the Ovary and Fallopian Tube," I made a careful study of the records and available specimens of extra-uterine gestation in what are called the lower animals and quickly satisfied myself that tubal pregnancy in them is very rare; indeed, I have failed to find a single convincing record or specimen, but there are very many cases recorded in which puppies and kittens inclosed in tightly fitting sacs have been found adherent to the omentum and intestines. Some of these cases of extra-uterine kittens and puppies have been regarded even by experienced pathologists as examples of primary abdominal pregnancy. In 1891 I advanced the following explanation of this phenomenon based on the actual dissection of many examples of rupture of the uterus in the early and later stages. In mammals with two-horned uteri the horns are of some length and often contain several fœtuses. When the fœtuses are too large to traverse the maternal passages the uterus as a consequence of its violent efforts to expel its contents ruptures and the fœtus or fœtuses are extruded into the abdomen. This accident in many instances entails the death of the mother and on examination in these circumstances there is rarely any difficulty in determining the course of events. In some cases the animal survives the accident and after the fœtus or fœtuses have escaped through the rent the contraction of the uterus rapidly follows and the edges of the opening unite and quickly cicatrise. The imprisoned fœtus adheres to the omentum, the amniotic fluid is absorbed, the placenta disappears, and the amnion shrinks and compresses the fœtus as tightly as if it had been swathed in mummy-cloth. (Fig. 1.) In time the amniotic sac becomes covered with fibrinous exudation furnished by the peritoneum which slowly organises and leads to a considerable increase in the thickness of the sac. In some instances the fœtal sacs do not adhere to any viscus but remain free in the abdomen.

FIG. 1.

A puppy in its amnion which with two others had been retained in the abdomen of a retriever bitch subsequently to rupture of the uterus. (Natural size.)

A prolonged study of this question has served to convince me that the majority of the cases of extra-uterine fœtuses met with in cats, bitches, ewes, and rabbits are not in any sense primary abdominal pregnancies; they belong to the same category as Leopold's case to which I drew your attention, they are, in fact, utero-abdominal pregnancies. This view of the origin of so-called abdominal pregnancy

FIG. 2.

A fœtal rabbit with its placenta inclosed in its amnion; found loose with others in the abdomen of a doe rabbit. (Museum of the Royal College of Surgeons of England.)

in mammals has recently received independent support by two observers, Pembrey and Kamann, from observations made by them on rabbits. In 1898 Dr. M. S. Pembrey exhibited to the Obstetrical Society of London five fœtal sacs which he found free in the peritoneal cavity of a rabbit. The animal (bought for breeding) was pregnant in October, 1897, and between that time and June, 1898, produced four normal

litters. It was noticed that the abdomen appeared to be somewhat distended after the casting of a litter. On that account and because this doe neglected or devoured its young it was killed within a week of the last littering. When the abdomen was opened five white discoidal bodies were found. None of the bodies showed any attachment to the abdominal organs or to the peritoneum; in all but the smallest sac the head, body, and limbs of a fœtus could be felt (Fig. 2). Dr. Pembrey then gives a careful and detailed account of the condition of the uterus and its horns; he found a scar on the front of the uterus just below the junction of the cornua. His conclusions are important, for he considers that the rupture occurred at least eight months before the examination of the doe, for in that interval it had four normal litters. From the size and development of the fœtuses in the sacs there is little doubt but they reached full term when the rupture took place. Sufficient explanation for the causation of the rupture is found in the fact that four fœtuses were inclosed in one sac, and he believes that it was the impaction of their bodies which caused obstruction to delivery and consequent rupture. The full description of the specimen is furnished by Dr. Pembrey and Mr. G. Bellingham Smith in the Transactions of the Obstetrical Society of London, vol. xlvi., p. 283, 1904, and the specimens are preserved in the museum of the Royal College of Surgeons of England.

Kamann has published an equally convincing case which also occurred in a rabbit.[1] This paper contains some very carefully done drawings illustrating the minute structure of the uterine wall in the situation of the scar. One of the fœtal sacs having become adherent to the omentum had dragged its stalk and undergone axial rotation, twisting its pedicle eight turns. Kamann, from a very careful investigation of his specimen, comes to the conclusion that it was a case of primary rupture of the uterus and that the embryos in their membranes were discharged into the abdomen and acquired an attachment to the omentum.

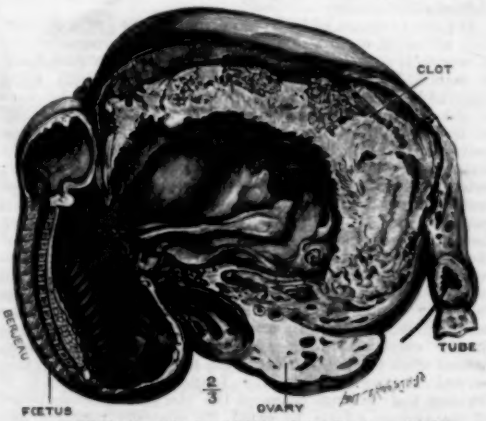
It is necessary to point out that when a fœtus in its membranes is discharged from the uterus into the general peritoneal cavity the amnion is a thin transparent glistening membrane, but the envelopes of these transplanted fœtuses are opaque, thick, and often tough. It has long been known that when foreign bodies gain entrance into the general peritoneal cavity they soon become covered with a fibrinous exudation formerly known as lymph, which quickly organises and not only forms an investment to the bodies but in many cases serves as a material which practically glues them to whatever viscus they may be in contact with. In the cases of the fœtal membranes it transforms them into a thick, tough, and opaque material.

It is curious to contrast the rabbit with the hare in relation to this accident. The rabbit has many young in a litter, 12, 14, or more. The hare has two or three at a birth and, unlike the rabbit, its young can see as soon as they are born. The hare is also liable to rupture of the uterus and the escape of the fœtuses into the abdomen, but its liability to this accident is less than that of rabbit, cat, or bitch; but a number of cases have been carefully recorded in which a gravid uterine cornu in the hare has undergone axial rotation, and in some instances the twisting of the cornu has led to its complete detachment. Cases of this kind have been recorded by Hutchinson, Dohrn, Klebs, and others. The references to the literature of these cases will be found in my book on the "Surgical Diseases of the Ovaries and Fallopian Tubes," second edition, 1896. Kamann has recently collected the German literature in an article in the *Monatsschrift für Geburtshülfe und Gynäkologie*, 1903, Band xvii., p. 588.

Gravid Fallopian tubes occasionally undergo axial rotation in women and carefully observed examples have been reported by Pozzi, Martin, and others. There are also reasons for believing that the same accident has occurred in connexion with cornual pregnancy. I am drawing your attention to these curious conditions in cats, rabbits, and other animals with the hope of proving to you that a similar process occurs in women, but with this difference, it is quite an exceptional thing for a fœtus to be extruded through a rent in the uterus into the pelvis or the abdomen and the patient to survive. As a matter of fact, Leopold's case, which has already been briefly quoted, is the only example that I know of in gynæcological literature. When pregnancy happens in the Fallopian tube the anatomical conditions of pregnancy in the long uterine cornua of the cat or rabbit are more nearly fulfilled, but be careful not to misread my meaning, for the Fallopian tubes of women and the long uterine cornua of the rabbit and cat are not homologous; the Fallopian tubes (oviducts) of these creatures will be found coiled up at the anterior extremity of each cornu. It has been abundantly demonstrated in the past 15 years that it is a very common event, especially in women who dwell in towns, for one or even both Fallopian tubes to become gravid, and I will give you some facts to prove that in some rare instances tubal fœtuses may be extruded into the general peritoneal cavity and be found in conditions similar to those of Dr. Pembrey's rabbits.

For nearly 20 years I have taken the deepest interest in the condition known as extra uterine gestation and the gradual unravelling of the facts from the fancies with which they were entwined until some 25 years ago can be described as most engrossing. One of the most difficult questions to determine, and especially to silence what may be called the conscientious objector, was the mode in which fœtuses found their way from the tube into the abdomen. Professor J. W. Taylor has shown in a very careful piece of work how those tubal fœtuses which go to full term slowly expand and erode the tubal wall as they grow, until the amniotic sac emerges into the general peritoneal cavity. His explanation is accepted by those who have had opportunities of operating on examples of this form of tubal pregnancy, but in all the cases considered by him and in those published by others to support his opinions the fœtal sac has remained in relation with the Fallopian tube in which it originated. I will ask you to listen to the following story. In 1891 Dr. Mendes de Leon and Dr. Catherine van Tussenbroek of Amsterdam communicated to the British Gynæcological Society a paper dealing with a case of ectopic pregnancy. The patient was a pale, fragile-looking woman, the mother of six children. Knowing that she was again pregnant and having passed the time when she ought to be delivered she was much disturbed that the confinement had not happened. The patient furnished a very clear history and such an obvious and very moveable lump existed in the abdomen that a diagnosis of abdominal pregnancy was made and an operation was decided upon. Upon opening the abdomen a fœtus appeared lying loose in the abdomen save for some adhesions to the great omentum. The fœtus, which had advanced to about the sixth month of gestation, was tightly girt about with its amnion. A round swelling occupied the left half of the pelvis and pushed the uterus to the right. This was removed and a subsequent examination disclosed it to consist of the left Fallopian tube and the shrunken placenta. The authors of

FIG. 3.



A gravid Fallopian tube in which the fœtus has been slowly extruded from the tube. Dr. Cullingworth's case. (Museum of St. Thomas's Hospital.)

the paper entered very carefully into the consideration of the mode by which this fœtus reached the general peritoneal cavity without entailing the death of the mother and suggested the possibility that the fœtus might have been expelled through the ostium of the tube or have escaped

[1] Monatsschrift für Geburtshülfe und Gynäkologie, 1903, Band xvii., p. 588, Berlin.

through a breach in its walls. Certainly this case is very exceptional among the records of extra-uterine gestation in the fact that the fœtus was free from its pelvic attachments.

The museum of St. Thomas's Hospital contains a specimen which in some of its features is as remarkable as the foregoing. In 1892 Dr. C. J. Cullingworth exhibited at the Obstetrical Society of London a gravid Fallopian tube which he had removed from a bright, healthy, active woman, 32 years of age. When the specimen was shown to the society it appeared so exceptional that it seemed expedient to submit it to a committee for special report; I happened to be a member of that committee of investigation. It will be seen on referring to Fig. 3 that the specimen consisted of a gravid tube, and that the gestation sac appears constricted into two compartments, of which one contains the placenta infiltrated with blood clot and that the smaller cavity is occupied by a fœtus which is compressed against its periphery by blood clot. The report concludes with this significant sentence: "There is no proof that the tube has undergone rupture."

This specimen has puzzled me from the time I first saw it but it is interesting to us to-night for it helps us to understand the case of Mendes de Leon because we have in it a fœtus arrested and killed in the act of extrusion from the tube. It may be through a rupture in the walls of the gestation sac or it may be, as some of us thought at the time when the report was formulated, a fœtus in its amnion in the process of extrusion through the cœlomic ostium of the tube. Oddly enough, whilst engaged in the preparation of this lecture, a short note[2] was published stating that Pestalozza in operating on a woman for secondary abdominal pregnancy found the fœtus in the recto-vaginal pouch; the placenta occupied the ampulla of the tube and the umbilical cord passed through the cœlomic ostium of the tube. This is a very important observation and it helps us to believe, with the evidence afforded by the observations of Cullingworth and Mendes de Leon, that a fœtus may be extruded into the abdomen through an unclosed cœlomic ostium.

That a fœtus may be extruded through an unclosed ostium is also proved by a case in Cullingworth's practice, recorded by Fairbairn, in which a fœtus was found in process of extrusion through the cœlomic ostium of a tube; the lower legs, trunk, and arms were hanging out but the head was too big to be ejected. I submit that these observations are of very great value, for the evidence previously available appeared to indicate that the discharge of a tubal mole into the pelvic cavity through an unclosed cœlomic ostium could only occur when it did not exceed the dimensions of a shelled walnut, but now we have to realise the probability that a fœtus advanced to the twelfth week of pregnancy may be slowly extruded through an unclosed ostium, an event as remarkable as it is unexpected.

The great object, however, which I had in view in collating the facts which form the basis of this lecture is to point out the valuable support they afford to the contention I have maintained for many years that primary abdominal pregnancy still remains an unverified speculation.

[2] Epitome, Brit. Med. Jour., Sept. 24th, 1904.

LITERARY INTELLIGENCE.—The Scientific Press announces that it will shortly publish an elementary Treatise on the Light Treatment for Nurses, by Dr. James H. Sequeira, physician in charge of the Skin Department at the London Hospital.—The University of London has made a new departure in the publishing, coincidently with the issue of the Calendar, of a number of pamphlets dealing with each faculty. Two pamphlets are published for each faculty, one for external and the other for internal students. They contain the rules and regulations for the several courses, together with examination papers. To some of the papers are appended "explanations." These pamphlets will, we consider, prove useful to those for whom they are intended, but we think that in a future edition of the pamphlet dealing with the Faculty of Medicine the schools of the University might be arranged in some kind of order, either alphabetical or in the order of their foundation, for this would facilitate reference, especially on p. 434, as regards the syllabus of "Courses of Instruction." The arrangement in the pamphlet before us is as follows, which is apparently constructed on no sort of plan:—University, King's, St. Bartholomew's, London, Guy's, St. Thomas's, St. George's, Middlesex, St. Mary's, Charing Cross, Westminster, Royal Free.

ABSTRACT OF

A Clinical Lecture

ON

A CASE OF PERIPHERAL NERVE INTOXICATION.

Delivered at the Bristol Royal Infirmary on Oct. 22nd, 1904.

BY HENRY WALDO, M.D. ABERD., M.R.C.P. LOND.,
PHYSICIAN TO THE INFIRMARY.

GENTLEMEN,—The patient, a young man of good physique and pale complexion, aged 33 years, married, a clerk and on night duty for nine months in the year, was admitted to the Bristol Royal Infirmary on August 31st, 1904, four days after the onset of illness. His habitual health was good until 12 months ago and he had not been the subject of any former ill-health. The attack began with retching and severe pains in the legs which lasted all one night. He said that the medical attendant thought it was rheumatism. On the following night the pains in the legs were still more intense and on the following morning one knee gave way and within the next 24 hours there was total loss of power in both legs and slightly so in the arms. The pains then left him with only tenderness in the legs and at the tips of his fingers. A catheter had to be passed twice a day for ten or 12 days.

We have here a case of paralysis which I must remind you is only a symptom of the disease. The brunt of the attack falls upon the motor, the sensory, or the vaso-motor nerves. The acute stage in this patient only extended over a few days with rather sharp pains in the legs and culminated in complete loss of power in them. The other initial symptoms were not very acute and constitutional disturbances were almost absent, excepting that there was retention of urine for a few days. The arms are only slightly affected. These cases are usually ushered in with severe symptoms and may resemble an acute infectious disease and be mistaken by any of us for rheumatic fever. This symmetrical palsy can scarcely be owing to a central lesion as there has been an absence of cerebral disturbance. The loss of power and the presence of pain and tenderness in the legs (the least pressure on the calf muscles caused intense pain) point to a peripheral cause and with the history of the abuse of alcohol this alone may be considered a sufficient reason for looking upon this case as one of peripheral neuritis. But what is called peripheral neuritis may be brought about by many other factors, as, for example, the diphtheria poison or the absorption of lead into the system or as a sequel of diabetes or enteric fever or influenza, and last but not least the swallowing of arsenic. An epidemic arising from this cause occurred at Manchester and was very ably reported in 1901 by Dr. E. S. Reynolds. The arsenic was discovered by him in the beer consumed by these patients to the extent of half a grain to the gallon.[1] Dr. Reynolds considered the arsenic and not the beer was responsible in most if not in all the cases in what had formerly been looked upon as the alcoholic type of peripheral neuritis. And this view was acquiesced in by many others who pointed to the enormous consumption of alcohol and the rarity of peripheral neuritis and also that the treatment of many cases of chorea over long periods by arsenic resulted in paralysis of the limbs. Sir William Gowers[2] drew attention to the fact that the trouble does not more often follow the prolonged use of Fowler's solution in combination with bromides in epilepsy. There have been many well-authenticated cases of peripheral neuritis recorded in which no cause could be discovered. Chronic constipation has even been suspected as the origin. There can be no doubt that exposure to cold may be a factor in its production, and this patient admits having sat in wet clothes shortly before his attack. It seems to be admitted that the effect of beer and arsenic in combination is a very fertile cause of this condition. In our

[1] See THE LANCET, Jan. 19th, 1901, p. 166.
[2] Transactions of the Royal Medical and Chirurgical Society, vol. lxxxiv.

patient here there is little doubt that alcohol alone (beer and spirits) was the chief cause.

I have called this case one of nerve intoxication rather than inflammation arising from the toxic effects of alcohol. Saundby thinks the tenderness over nerve trunks affords clinical support to the theory of inflammation. Hamilton would prefer to call it a degeneration due to the action of a poison resembling that of phosphorus upon other tissues. I do not think we are justified in concluding that inflammation or degeneration is present. The electrical reactions in this case are not those of degeneration, there being no response to either faradism or voltaism. The extensor muscles (anterior tibial and musculo-spiral group) are most affected by these toxins and it is difficult to explain the reason excepting in the knowledge that they are much weaker than the flexor muscles. And, again, the terminal portions of the nerves are nearly always first and most profoundly affected, the reason of this being that their peripheral ramifications cover a much larger area than they do when collected into bundles and so are more exposed to the poison circulating in the capillaries. And then they are farthest removed from the nerve cells upon which their very life depends. I may say in passing that females are much more liable to become the victims of this form of paralysis than men. I will now touch upon some of the more prominent signs and symptoms. Of the deep reflexes the knee-jerks and arm-jerks are totally absent, but you may conclude that they will return when the patient recovers. This is just the opposite to their behaviour in tabes dorsalis, where they are lost for all time. Some years ago Ross pointed out that the knee-jerks were often exaggerated in the very early stage of peripheral neuritis, but it is seldom one sees these patients at that period of the disease. The superficial reflexes are absent in this case, which is rather unusual. The amount of pain and tenderness varies a good deal in different cases, but the sensitiveness of the calf muscles is nearly always well-marked; it is said to be present in a high degree when depending upon arsenic. Ankle-drop is well illustrated in this patient and you notice that the toes are curved into the soles of the feet. When the loss of power is less profound ataxic symptoms may be present, the patient cannot raise his toes, and they are liable to catch in the floor when he tries to walk. Wrist-drop is more to be seen in lead poisoning and in these cases the sensory nerves escape, the palsy being limited to motion. The muscles, especially in the legs, are soft and flaccid and waste rapidly. When the arms are affected from the effect of alcohol the thenar and interossei may also participate in the wasting. The supinator longus is usually affected in alcohol poisoning, but there are exceptions to this. You are aware that it escapes in plumbism and serves as a means of differential diagnosis. The sphincters defy these toxins in peripheral paralysis and so do the trophic nerves—one scarcely ever sees bedsores in connexion with these cases. Glossy skin in patches is sometimes present. Formication and other paræsthesiæ are seldom absent and painful cramps which interfere with sleep are not uncommon. If the facial muscles are involved the patient is quite expressionless. You will notice that there is a tendency to nystagmus in this man, but to obtain it you must tire out the recti muscle for some minutes. Gowers has often seen nystagmus in association with his cases, but the majority of writers consider it a rare occurrence. I have seen it stated that mental failure attended with delusions and even extravagant ideas resembling general paralysis of the insane may attend these cases and loss of memory is frequent. It is extremely seldom that the vital centres become affected although the late Dr. W. Miller Ord said that he had seen the vagus attacked, giving rise to marked and even fatal cardiac disturbance. The legs are so extremely paralysed in this patient that one begins to fear that the mischief may have ascended to the spinal cord and invaded the anterior cornual cells, but there is at present an absence of all the signs indicating a cord lesion, but at the same time such a powerful authority as Gowers thinks that a neuritis limited at first to a peripheral nerve may extend upwards and involve the larger nerve trunks, or even reach the spinal cord, causing subacute myelitis. And Dr. J. A. Ormerod says that it is extremely probable that peripheral neuritis is often associated with lesions of the nerve centres. I must confess that I know of no means of making a differential diagnosis with any certainty between anterior poliomyelitis and severe peripheral neuritis. All we can do is to wait patiently, often over months of time, in the hope that the large motor cells in the cord have escaped. The muscles in this man's legs are not so very much wasted, and on that account I am disposed to take a favourable view. I have sometimes thought that the action of the diaphragm has been interfered with in association with these cases, but it is a very difficult thing to satisfy oneself upon. The temperature in this patient has been very little above normal and I see that Dr. P. H. Pye-Smith noticed that pyrexia was only occasionally present.

From experience we know that the prognosis in peripheral nerve intoxication is extremely favourable in the vast majority of cases, but to arrive at this conclusion in any particular patient you must take into consideration the state of his abdominal and other organs. The prolonged effect of alcohol generally expends its baneful influence on the liver and the insidious symptoms of derangement of this gland are often obscure and may be easily overlooked. However, as far as I am able to judge, this man's liver is healthy. Up to quite recently medical authorities have not considered that alcohol does much damage to the kidneys, but the pendulum seems to be swinging in the opposite direction, and this view is somewhat borne out by the history of this case, for there was a cloud of albumin in his urine each day for four weeks after admission, but it has now disappeared and the urine is healthy. As far as we are aware he has consumed no alcohol of any kind since he has been in the infirmary. And with the rest and equable warmth of bed he has been under the best conditions for allaying the nephritis which was beginning to damage his kidneys, the origin of which, there can be no reasonable doubt, was the effect of alcohol. In giving a prognosis I should be guided by the persistent presence or absence of albumin in the urine almost more than any one other sign. There is nothing in the chest here to influence one unfavourably and so I can advise you to give a good prognosis and there is every ground for thinking that this patient will make a complete recovery. Almost the only cases of peripheral neuritis *per se* which do not regain power in the limbs are those in which lead is the materies morbi, and when you see well-marked wrist-drop from this cause which has been long neglected you will do wisely to give a very guarded prognosis. You must also be cautious in prognosticating when the palsy depends upon the diphtheria toxin, for in these the heart may dilate rather suddenly and unexpectedly and account for alarming symptoms (toxic myocarditis).

With regard to treatment, all are agreed that the one all-important factor in treatment is rest in bed. If the pains are severe enough to prevent sleep it may be necessary to give morphine but before doing so the effect of hot water fomentations, which sometimes relieve the pain and tenderness, should be tried. When the more acute symptoms have passed off a daily warm bath is to be recommended. If the tenderness is not excessive massage gently done should be practised. To prevent the muscular substance from degenerating we are using slow interruptions of the constant current battery. There was no response to this for some time but now there are slight contractions. This current, as you know, acts directly upon muscular tissue. When you can get reaction to an induced (faradic) current, which acts indirectly through the medium of a nerve twig, it will be better to employ that. I have withheld the injection of strychnine into the muscles as the patient has been improving, although very slowly, and still have this in reserve. It should not be used during the acute stage of the illness. I would advise you to avoid arsenic in the treatment of these cases.

PRESENTATION TO A MEDICAL PRACTITIONER.—The President, officers, and members of the Sheriff Hutton Free Gift Society on Nov. 25th presented Dr. Gramshaw of York, on his resignation of the office of surgeon, with a silver salver bearing the following inscription:—"Presented to F. Sidney Gramshaw, M.D., F.R.C.S. Edin., as a token of respect and esteem for nearly 30 years' faithful service."

DEATHS OF CENTENARIANS.—The *Times* of Dec. 2nd states that Mrs. Mary Ann Gibbins died on Nov. 29th at Huyton, near Liverpool, in her 104th year. About 12 months ago she sent to the Queen a beautiful piece of needlework which she had executed and received a gracious letter of acknowledgment from Her Majesty.—On Nov. 30th Mr. Richard Philbin died in Liverpool, aged 107 years.

DISEASES OF THE NERVOUS SYSTEM SOMETIMES REGARDED AS FUNCTIONAL, WITH PARTICULAR REFERENCE TO DIABETES.

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IN regard to many regions of pathology, notwithstanding the light which bacteriology has thrown upon some disorders and the suspicion it has cast upon others, we cannot but recognise that there are still diseases and groups of diseases with regard to which what we know is as nothing compared to what we hope to know. What with improved instruments and new methods we know not what a day may bring forth. The last hundred years have taught us more of the processes of disease than all preceding time. As time passes the pace quickens. We know not what view is about to open upon us or what knowledge awaits us. It is probable that no branch of knowledge which relates to this earth has made greater progress within living memory than that which has to do with the nature of disease, though I fear that the arts of prevention and cure have not made corresponding advances. This is inevitable. Science must come before the application of it, not that science is everything. Much has hitherto been done empirically not without advantage to medicine and humanity; now science is asserting itself and promises to provide our chief line of march in the time to come. We are learning something of Nature's ways, if only of doing harm. *Fas est ab hoste doceri.* In learning how Nature propagates disease we may find out how to obviate it. We may confidently presume that the future will let light into many dark places and show to us we know not what. There is nothing to be expected with more confidence than the unexpected. Let us keep our eyes and minds open and not be too sure when we see nothing that there is nothing to be seen. "Do you see nothing there? Nothing. Yet all that is I see." But the ghost was there all the time. Let us not be too ready with the word *functional*, though it has its uses; it sometimes displays our knowledge and more often conceals our ignorance.

The more simple or the more mechanical is the action of any organ the more it comes within our limited comprehension. In the heart, for example, whatever else may have to do with it we can admire and partly understand a masterpiece of hydraulic machinery and if it goes wrong we can generally find out how. The lesions are for the most part obvious and the results traceable. So with other organs, say the lungs and kidneys; with symptoms of pneumonia we have the recognisable organic change which underlies them; with renal dropsy we discern renal changes. The connexion between structure and function is as inseparable as between cause and effect and if we sometimes see the effect without the cause we do not doubt that the cause is there, though we have not yet found it out. Consequences may be apparent of which the causes are hidden, as a storm may blow we know not why but we know full well that it does not blow without reason. *Felix qui potuit rerum cognoscere causas.* It is left to the pathologist of the future to go behind the veil and to discern the real *causa causans* of disorders which however well defined clinically are not so pathologically and of which we are fain to confess that what we see is only enough to suggest that there is more to be seen.

Of all the diseases to which flesh is heir those of the nervous system are the most obscure in their pathology. We know more than we did but must humbly confess that too often our knowledge is obviously superficial, indefinite, and inconclusive. As an instance of what has been accomplished we may take poliomyelitis, formerly known as essential paralysis, as if what was essential was the effect and not the cause. It is of comparatively recent years that the disorder has been traced to inflammatory, hæmorrhagic, and degenerative localisations in the cord. We know of these but we do not yet know all about them, nor how they came to be where they are. But we know something and have got to a lesion which explains the symptoms. Hydrophobia from time immemorial has been associated with a specific poison. Now, we have done as much and more for tetanus, for we have isolated the materies morbi. But with regard to both we still have much to learn, for we are ignorant of the manner in which the poison acts on the nervous system so as to bring about the symptoms. If with tetanus we find distinct and even conspicuous hæmorrhage in the cord, even to the extent of lacerating its substance, yet since this is not found always it may be regarded as only collateral, as accidental rather than essential; but, at any rate, it is evidence of a morbid hyperæmia which plays a part, though only a secondary part, in the disease. But at least we have got to something which promises more.

Of chorea much may be said which applies to tetanus, though there is this difference—one is always produced by a specific poison, the other only sometimes. In chorea the evidence of disturbed vascularity is as great as in tetanus and of the same kind. We see in both evidences and results of hyperæmia in corpuscular extrusions, effusions of liquor sanguinis, and extravasations of blood in bulk and entirety. Among the more striking of these hyperæmic processes is the dilatation of the central canal of the cord, presumably due to exudation within it, seen in chorea and diabetes, though not constantly in either. To speak for the present only of chorea and tetanus, it is clear that we do not see all, but we see enough to assure us that the nervous centres, or some of them, are abnormal and concerned in the symptoms which are manifested through the nervous system. It is obvious that we do not see all or do not take all in, for if two cords were presented to us, one of tetanus, the other of chorea, so imperfect is our present knowledge that we could not say which was which nor distinguish between the hyperæmia of one and the other. In both the congestion is distinctly morbid; the physiological has given place to the pathological, which is declared by morbid injection of the vessels and extrusion of their contents, the one constant, the other occasional, but we are well aware that underneath these superficial, if obtrusive, signs there is something else which constitutes the disease and determines the symptoms. In tetanus we have been made aware of a bacterial poison which especially affects the cord; with hydrophobia we cannot doubt that something of the kind, at least something which can be conveyed, brings its influence to bear upon the medulla. In both, as we have a material poison the question of "functional" disease does not present itself to our imagination; we have to do with an obvious materies morbi which is sufficiently satisfying in a pathological sense.

So far as we can judge from tetanus and chorea—as to hydrophobia I have had no opportunities of observation—the organic changes appear to be always of the same kind, comprising the various consequences of hyperæmia, overloading of the vessels, extrusion of liquor sanguinis, and in an extreme case breaking up of the substance of the cord by what may be termed explosive hæmorrhage. Having regard to the interest and importance of the material changes which accompany diseases which have been called functional I venture to draw attention to illustrations which I contributed many years ago to the Transactions of the Royal Medical and Chirurgical Society and to Holmes's System of Surgery.[1] These represent sections of the cord from a case of traumatic tetanus showing extensive laceration of the central grey matter and occupation of the rent with blood and liquor sanguinis, displaying an injury which is no more functional than an apoplectic clot of the size of a goose's egg deserves to be so-called. Tetanus used to be thought a "functional" disease, or one without a pathology; it is so no longer. I advert to what is obvious only to point out a parity of argument and a similarity of lesion between tetanus, demonstrably an organic disease, and chorea, which is still regarded by some as functional, though putting aside the tetanic microbes there is as much visible evidence in chorea as in tetanus that the cord is in an unnatural condition and unnatural in the same way. I may appeal to a drawing published by the Royal Medical and Chirurgical Society[2] which represents an apoplectic extravasation in chorea which may be fitly compared with that in tetanus and is presumably of a similar origin.

Chorea, like tetanus, is a disease of the nervous system of

[1] Holmes's System of Surgery, third edition, 1883, vol. i., p. 206. See also Transactions of the Royal Medical and Chirurgical Society, vol. li., Spinal Cord in Tetanus, by W. H. Dickinson, plate xii.

[2] Transactions of the Royal Medical and Chirurgical Society, vol. lix., plate iii.

which the lesions, putting aside those of the heart, are chiefly displayed in the spinal cord and that by way of hyperæmia and its consequences. As in tetanus the degree of hyperæmia is various, it may even attain to "apoplectic" extravasation and present itself conspicuously to the naked eye within the substance of the grey matter. Other resulta of hyperæmia are sometimes found in the effusion into the fissures of liquor sanguinis and in dilatation of the centrts canal no doubt by a similar exudation. These and lesser signs are evidences of a morbid attitude of the blood-vessels, presumably of the arteries, which we hypothetically attribute to their vaso-motor nerves. We know that we do not see all but at least we see that in our estimate of the morbid process which constitutes chorea hyperæmia, exudation, and hæmorrhage are to be reckoned with. At what bidding the nerves thus misconduct themselves we know not or know only partially. Fright and rheumatism are apparent in this relation but how they are connected with what seems to be a local vaso-motor paralysis we know not.

It may be maintained with much show of reason that there is no such thing as a functional disease if by this we mean abnormal action with normal structure and normal influences from without. There must be a reason for the wrongdoing and if there is none in the surroundings or circumstances it must be in the organ itself. There may be, and no doubt are, disorders of which we do not know, and perhaps may never know, the essential cause, whether intrinsic or extrinsic, or if intrinsic of what nature, but the mills of God grind exceeding small and there is much in nature, sound or sickly, which is not to be reached by the coarse vision and clumsy methods of the twentieth century. Organic changes are not necessarily obvious. Some presumably exist and produce their effects which elude our observation. There may be changes in nutrition by way of shortcoming or overplus which, though little exposed to view, may be prodigal in results, particularly in the nervous system. Such changes may be none the less organic because they are inconspicuous. There may be diseases of which we have not discovered the pathology, but the disease does not exist which has none. If the machine goes wrong and the surroundings are right we must look to the works. The morbid anatomy may be too minute, or in some way too elusive, for our senses or instruments, and yet be there. There is something not only unsatisfying but repugnant to our intelligence in supposing that a disease like chorea, which will go on in spite of every change of circumstances until it wears the skin off the joints, the flesh off the bones, and the life out of the body, should depend on nothing more enduring than an unreasonable and unaccountable caprice on the part of the nervous system as if it were actuated by simple malevolence, for it does wrong when it is structurally capable of doing right; or that diabetes, which will persist unto death in subverting the vital processes of nutrition, should be due to no change in the organs or structures which misconduct themselves so fatally, but be purely functional, the organs or structures on this hypothesis being as capable as ever of doing the right thing but doing the wrong by preference or perversity.

We may provisionally apply the term "functional" to disorders of a temporary sort which have not yet displayed their morbid anatomy, however we may suspect that there is something behind which is unknown to us. The term is less irrationally applied to passing than to persistent disturbances and is most obviously out of place when it is attached to such as persist unto death and produce it. Hysteria, delirium, and epilepsy may be called functional with less improbability than chorea, insanity, and diabetes.

An able writer,[3] one unhappily no longer with us, one of great literary gift and considerable clinical acuteness, wrote a book of which the chief purpose was to show that chorea was a *functional* disease—a disease without a pathology, disturbance of action unattended with change of structure. But it has been shown that though we may not have got to the *fons et origo*, the prime instigator or essential morbid change with which chorea is always present, and without which chorea is always absent, yet we see enough to assure us that the relation of the blood-vessels to the cord is unnatural and always in the same way, that of hyperæmia, a constancy of morbid action which must be taken into account in any hypothesis by which we may seek to combine the facts of the disease.

[3] On Chorea, by Octavius Sturges, second edition.

Dr. Sturges[4] asks whether chorea "may not be looked upon as a functional disorder, a motor disturbance which is as much beyond the reach of anatomical demonstration as are the various passions and motions which like it distort and coerce the body in a variety of ways." To this I say, *No*. Much beyond our reach there may be but not everything. Morbid changes are found in abundance though it is probable that there are others which we have not found. Those which we have found are all of the same nature—hyperæmia and its consequences. In his determination to see nothing but what is functional, nothing but what is invisible, Dr. Sturges recognises nothing in the way of morbid anatomy as having to do with chorea. Though the characteristic symptoms of the disease have concurred with an appropriate lesion of the cord which but for the chorea assuredly would not have been there: he would say that such an one died not *of* chorea but *with* it.[5] He happened to be having chorea when he died but the chorea had no more to do with his death than Tenterden Steeple with Goodwin Sands.[6] I had put together some facts of morbid anatomy collected from the post-mortem examination of seven cases of chorea in which various phases of injection and extravasation were as evident in the cord as had been nervous symptoms apparently of spinal origin evident during life. I had somewhat loosely reverted to these as "fatal cases *of* chorea. Dr. Sturges takes exception to the phrase "fatal cases *of* chorea" and prefers to describe them as "fatal cases *with* chorea," as if the chorea and the fatality were quite disconnected. This criticism, however, has at best but a limited application. No doubt chorea is intimately associated with valvular disease of the heart; where the two concur the latter may be the chief cause of death, in which case it may be said without impropriety that the patient did not die *of* chorea but *with* it. But what shall we say when, as in four of my seven cases, the chorea was the leading disorder and the obvious cause of death? And what shall we say to the hyperæmia of the cord, leading in one case to a bulky extravasation, if chorea is purely functional, an immaterial essence which holds no communication with anything so gross as morbid anatomy?

Where physiology ends pathology begins. In health the movements of the voluntary muscles are voluntary; those of chorea are involuntary. As the involuntary supersedes the voluntary we may suppose that the normal state of the nervous system is superseded by the abnormal. And do we not find abnormity enough to suggest that things are substantially wrong? Are extravasations of blood and liquor sanguinis and dilatation of the central canal to be wholly disregarded? It is true that the lesions are inconstant and miscellaneous, but they are all results of the same condition—hyperæmia.[7] In one of the seven cases which furnished me with post-mortem examinations a clot one-twelfth of an inch long had torn its way into one of the cervical horns; in another the central canal was greatly dilated, in one part containing blood, in another apparently empty; a third case, that of an old woman, presented, as a picturesque object under the action of carmine, an extravasation of liquor sanguinis in the anterior fissure and others in connexion with the posterior horns. I have made no mention of less striking, but not less significant, extravasations in the subarachnoid space and elsewhere and have scrupulously omitted all appearances of doubtful interpretation, but enough remain to form a curious illustration of functional disease. There is a resemblance, not to be overlooked, to what is found in tetanus.[8] In each we have a morbid change of which injection is the outward and visible sign. In tetanus we have the parasite behind; in chorea we have behind something as yet unknown.

We have a superficial knowledge that certain mental impressions, above all fright, and certain conditions of disease, notably rheumatism and scarlet fever, may give rise to chorea; of the process we know nothing more than that it is attended with a morbid fulness of vessels which we hypothetically attribute to a paralysing or relaxing influence brought to bear upon them. This is not all but it is something. We are conscious that there is more behind. But

[4] Chorea, second edition, p. 115.
[5] Loc. cit., p. 88.
[6] The Pathology of Chorea, by W. H. Dickinson, Transactions of the Royal Medical and Chirurgical Society, vol. lix., 1876.
[7] Transactions of the Royal Medical and Chirurgical Society, vol. lix., plate iii., fig. 1.
[8] Ibid., vol. li., plate xii., fig. 1.

what we see is something material and is enough to remove chorea from the unsatisfying category of functional diseases. It is true, so imperfect is our knowledge, that what we see does not distinguish chorea from some other diseases of nervous origin, but in this and others we see material evidence of morbid action. Evanescent or temporary disturbances may be due to evanescent or temporary influences, as a spasm of the larynx may be produced by a blast of cold air or a passing diarrhœa by a haustus sennæ, but where the disorder is permanent or enduring we must look for a cause which is equally persistent. A fright which lasts a minute may cause chorea which lasts for months. Is it not probable—indeed, is it not certain—that the fleeting first cause leaves behind it a lesion which is not so? The substantial disturbances of the spinal cord in tetanus and chorea are uniform in kind though they present considerable variety in place and degree; in tetanus we cannot doubt that they are the secondary results of a parasitic intrusion; in chorea we recognise, as in tetanus, a morbid hyperæmia which appears to be rather a secondary or collateral consequence of the disease than the *primum mobile;* nevertheless it is something, and it is there and proves beyond doubt or cavil that the cord is materially involved. Similarly in diabetes, though we have not discovered the initial change, we see sufficient signs of morbid action in the cerebro-spinal centres to indicate that they play a part in the disease. The extravasations which have been found are not large enough or constant enough to account for the diabetic process, but they suggest an attitude of the vessels which may have something to do with it. These pathological indications, slight though they be, which connect the brain with glycosuria are the more significant when taken together with much that was previously known: the production of glycosuria in animals by puncture of the medulla, and in man by wounds and injuries affecting the same part of the brain, and the occurrence of diabetes in consequence of mental emotion in the shape of grief, terror, or anxiety.

The temporary exaggeration of diabetic diuresis under mental perturbation is not an unfamiliar experience. In illustration of the same association I may call attention to an observation which has recently been made known—namely, that engine-drivers, whether in England or America, are especially liable to diabetes—a liability to be attributed, we may presume, to the anxious nature of their calling. This proclivity, which appears to have been first pointed out by Dr. A. H. Smith of New York, has been further illustrated by Mr. Herbert W. Page,[9] surgeon to the London and North-Western Railway, who tells us that the drivers on this railway present a mortality from diabetes which is nearly twice that of the ordinary population. So many independent lines of experiment and observation, pathological and clinical, point in the same direction that if the brain have not to do with glycosuria Nature and Art have combined to deceive us.

In view of the many indications of a connexion between the exalted organ and the humble secretion it occurred to me, now many years ago, to inquire whether glycosuria presented any clinical association with insanity. If insanity be a disease of the brain and glycosuria, as with Bernard's rabbits, a result of cerebral irritation, the two should sometimes concur. I was allowed to make the inquiry at Bethlem Hospital and obtained a reply in the affirmative so far as related to a small proportion of the lunatics which were put to the question and sugar in small quantities. There was no instance of fully developed diabetes in the cases to which I refer,[10] but traces of sugar were found, so far as the reduction of copper could be taken as a test such as to point to a connexion between insanity and glycosuria. Copper, as is well known, may be reduced by ingredients of the urine other than sugar, though not to the same extent or quite in the same manner; the darkening of the urine with liquor potassæ and heat must be well marked to be conclusive, but for practical purposes the two tests taken together or the copper by itself, if the response be characteristic, may be trusted until assurance doubly sure is afforded by fermentation. My observations were made with copper in the shape of Fehling's test and with liquor potassæ by itself. Among 106 lunatics, passing over the lesser and insignificant reactions, were 18 who gave decided reduction, among which were three in which it was considerable. The indications afforded by Fehling's test were generally confirmed by the action of liquor potassæ. The emphatic response to these tests in some cases was decided evidence of sugar; in others the reply was less conclusive and perhaps in some inconclusive, but the occasional presence of sugar in the urine of the insane appeared to be beyond doubt. Further observations were needed to show how often and whether in one sort of mental disease more than another.

I am glad to be able to appeal to the later and larger experience of Dr. C. Hubert Bond at the London County Asylum, whose tests included that of fermentation. Dr. Bond places before us "32 cases of glycosuria or diabetes associated with insanity." He shows that of 355 recent cases admitted into the Banstead Asylum 19, or 5·32 per cent., displayed sugar in the urine on admission. It is to be noted that patients with melancholia were especially subject to this complication, 114 cases giving 11 of glycosuria, or about 10 per cent. Dr. Bond draws attention to an observation of Dr. H. Maudsley's that diabetes often shows itself in families in which insanity prevails and that the two diseases "are certainly found to run side by side or alternately with one another more often than can be accounted for by accidental coincidence or sequence." Other observations have been made which bear witness that a certain, if a small, proportion of lunatics present the urinary change in question. Mr. R. R. Leeper[11] describes three cases of melancholia in which the urine contained sugar; in two the glycosuria ceased with the melancholia; in the third the melancholia outlasted it. Dr. Emil Raimon[12] tells us that of 114 patients in various forms of idiocy and mental disease, putting aside two diabetics who were among the number, 14 showed some degree of glycosuria. Dr. Raimon attributes this condition in these circumstances to a failure in the power of assimilating sugar, which serves to emphasise the fact, though scarcely to explain it. Dr. W. R. Dawson describes in some detail[13] seven cases of glycosuria associated with insanity which had come under his notice during the 15 months ending Jan. 1st, 1902. He distinguishes two classes, one in which morbid mental phenomena have arisen in the course of glycosuria, the other in which glycosuria developed during an attack of mental disease, "the former class being rare, the latter fairly common." Of the former class he gives only one instance. Of the seven cases related three were of melancholia. Finally, I will content myself with the admission of Dr. W. Hale White who repeated my observations at Bethlem with critical intent, but has furnished testimony to a certain extent supporting them which is valuable as that of an adversary. He admits that in 49 lunatics in this institution he found "slight cupric reduction in five and undoubted sugar in two." In view of this admission it is of interest to note a later statement which appears to be scarcely consistent with it. "About 20 years ago," says Dr. Hale White,[14] "when the nervous theory of diabetes was in the ascendant, it was urged in support of it that the urine of lunatics frequently contained sugar. Dr. G. H. Savage and I showed that this was not so." The unqualified negative is misleading. "Bate me an ace quoth Bolton." Did the urine *never* display sugar or only *not frequently?* If "not frequently" implies "sometimes" myself and my critics are of one accord. The language needs more finish. I would suggest as an improvement that instead of saying absolutely, as if there were no truth in it, "Dr. Savage and I showed that this was not so," the phrase should run, "Dr. Savage and I showed that this was so, in so far as among the patients in Bethlem we found undoubted sugar in over 4 per cent. and suspicion of it in over 10 per cent."

The questions that remain are no longer whether sugar is to be found in a tangible proportion of lunatics, but in what kinds of lunacy and in what proportions. Dr. Bond's researches do something towards these ends As sugar in appreciable quantity is no ingredient of the urine in health we must look for morbid associations wherever we find it. For academic completeness we should know how often sugar is to be found in the average sane person belonging to the class by which Bethlem and Banstead are supplied. Among a large number of persons in apparent health there must be a small number who have upon them

[9] Observations by Mr. Herbert Page. Quoted by Dr. Saundby, THE LANCET, May 19th, 1900, p. 1421.

[10] Renal and Urinary Affections, vol. i., Diabetes, p. 62.

[11] Journal of Mental Science, October, 1901, p. 758.

[12] Brit. Med. Jour., Epitome, Nov. 9th, 1901, p. 73.

[13] Glycosuria and Insanity, by W. R. Dawson, M.D., Medical Press and Circular, Jan. 1st, 1902.

[14] THE LANCET, March 14th, 1903, p. 715.

the glycosuric beginnings of diabetes. How many or how few these may be we do not know accurately—certainly nothing like 5 per cent., which, speaking roughly, is Dr. Bond's estimate of the glycosuric coefficient of Banstead comprehensively, or 10 per cent., which is his estimate for melancholics. Dr. Bond's figures do something towards supplying a standard of comparison for themselves, for while 82 maniacs give no instance of glycosuria 114 melancholics gave 11. If this difference should prove the rule glycosuria must have some morbid relationship with melancholia which it has not with mania. It is not necessary to suppose that insanity directly causes glycosuria or glycosuria insanity, but that the morbid condition of brain which accompanies some forms of insanity is capable of instigating glycosuria.

I will not presume to say whether or not "the nervous theory of diabetes is still in the ascendant," but, supported as it is by so many converging lines of evidence, it is difficult to suppose that there is not something in it. If there be not there is much to explain and to explain away.

While upon the clinical associations of diabetes which relate to the nervous system some may be mentioned, though they are equivocal in their bearing, since they may either be connected with this disease in its origin or acquired in its course, possibly as consequences of the action of the morbid blood upon the nervous structures. The loss of the patellar reflex is common in diabetes and I judge it to be usually an early symptom, as if belonging to the disease in its beginning rather than acquired in its course. I have even known the loss of this reflex to have been noticed before any other sign of the disease had come under observation. Whether this loss is a result of the attendant changes in the blood or a part of the presumed initial modifications in the nervous system must remain to be seen. A less common nervous failure and one of later production is superficial impairment of sensation especially affecting the lower limbs. I mention this by the way, though it contributes nothing to the nervous origin of diabetes, for like the loss of the patellar reflex it may be *post hoc;* not therefore to found either upon the loss of reflex or of sensation, we must nevertheless recognise and duly appreciate certain post-mortem changes which are more significant or less equivocal.

Coming now to pathological observation, in other words to the post-mortem condition of the brain and cord, we see something, but what is most evident to us is that we do not see all. As with tetanus and chorea, we find results of a morbid relation between the blood-vessels and their surroundings which, however interpreted, do not admit of dispute. For the most part these are hæmorrhagic or exudatory, they have obviously taken place during life, and they indicate an abnormal condition of the vessels which allows their contents to transpire. These have been sufficiently described and represented[15] and need no recapitulation here unless it be to dissociate ante-mortem and vital changes from some which are cadaveric. In the early days of neuropathology sufficient allowance was not made for the instability of nervous structure and certain changes, to one of which the term "miliary sclerosis" was given, were thought to have taken place during life instead of, as they had done, after death, but speaking only of what are obviously the results of vital action we find in connexion with diabetes perivascular hæmorrhages, not by rupture but exudation, enlargement of the perivascular spaces giving in section and in parts a cribriform appearance, and a dilatation of the central canal of the cord to which the name "syringomyelia" has been given.[16] Abnormal these changes certainly are, but none of them are peculiar to diabetes, nor with diabetes are they constant in place or degree. As with tetanus and chorea they mainly indicate hyperæmia. But there must be something behind: with tetanus it is a bacillus; what with chorea and diabetes we know not, but at any rate in both a distinctly morbid hyperæmia forms part of the process.

As taking part in the disturbed physiology of diabetes and presenting an unnatural pose as regards its blood-vessels, though the changes hardly come within the scope of morbid anatomy, the liver claims especial mention. It has long been known that this organ in this disease presents various signs of congestion. Prout mentions engorgement of the portal veins, congestive enlargement, and jaundice; and other writers adduce other particulars to the same purpose. Examined minutely in section, after hardening, the repletion of the vessels, both venous and arterial, is manifest. The arteries are often seen to be full of blood as well as the veins—in health, as is scarcely necessary to observe, the arteries after death are empty. Thus, not to insist on more than can be easily demonstrated, we find evidence of arterial debility, of the nature of, if not amounting to, vaso-motor paralysis, in the brain and in the liver; whether more general I cannot say, but it is evident that the face in certain stages and degrees of diabetes displays a dusky-red congestion which is not characteristically venous in its colour and is suggestive of vascular collapse. In the brain we see evidence of a similar vascular pose in the hæmorrhages by transudation to which attention has been drawn, and in the cord a suggestion of it by the exudation which in a tangible minority of cases occurs within and dilates the central canal. In the liver we see engorgement, presumably the result of a similar condition of vascular ineptitude.

The vaso-motor paresis, or nervous debility, as it may be called, which on grounds of post-mortem observation I have attributed to the cerebro-spinal system and to the liver, has been inferred by Dr. F. W. Pavy, as far as the liver is concerned, on grounds unconnected with morbid anatomy. Dr. Pavy strictly limits his theory to the chylo-poietic viscera and to one form of diabetes. Different lines of inquiry may lead to similar results, as must necessarily be the case if there is any truth in the conclusion. Says Dr. Pavy,[17] "a vaso-motor paralysis implicating only the vessels of the chylo-poietic viscera may stand at the foundation of the form of diabetes limited to the defective assimilation of the ingested carbohydrate." My observations are less restricted than Dr. Pavy's inference, though they are not offered as complete or as anything more than an indication of something as yet unknown.

Taking together the results of experiment, of accident and disease, of mental impressions, and, though not frequent yet significant, the association of glycosuria with insanity, and adding to these the post-mortem evidences of transudation from the cerebral vessels, it is not to be doubted that there is a connexion between the state of the brain and the voidance of sugar which must be taken into account in any theories we may form of diabetes. So far we discern a condition of vascular relaxation which affects the brain and the liver, shown in the one by corpuscular transudation and in the other by arterial fulness after death. Whether a similar want of grasp affects other vascular systems we have little knowledge though the complexion is suggestive. We cannot suppose that what we see is all that is to be seen, but at any rate it is something.

That diabetes any more than chorea or tetanus is a mere functional error, a capricious misconduct on the part of healthy organs or tissues, is a proposition which is repellent to my understanding and, to my mind, impossible. Are we to suppose that we have got to an end of pathology because at present we cannot get any further? That "this effect defective comes by cause" is certain; that this effect if persistent must have a cause which is equally so is likewise certain.

It has been imagined, to take a recent hypothesis before the older, that the essential part of the disease is an inability on the part of the tissues to put the carbohydrates to their proper use in nutrition which, therefore, are discharged as waste in the form of sugar. The error is not over-production but insufficient consumption. It is not that too much sugar is made but that too little is used. This failure on the part on the tissues to do their duty is unexplained. They do not look amiss. Whence comes the paralysing or inhibiting influence? If the failure were always senile we might see in it one of the deteriorations of age, but how when it strikes the young possibly in the shape of an almost acute disease? And from another point of view this theory is not satisfying, for it seems inadequate to explain the large quantities of sugar which are sometimes discharged—in an extreme case perhaps two pounds or even more daily. Are we to suppose that in health an equivalent amount of carbohydrate would have gone into the tissues? Could the tissues in health have

[15] Renal and Urinary Affections, vol. i., Diabetes, pp. 35, 36, 37, 38 (Figs. A, B, C, D, E, F).

[16] Loc. cit., p. 44, figs. K and L.

[17] The Physiology of the Carbohydrates, 1894, p. 263.

taken up, or made away with, so much? Yet this they must have done, on the theory, so far as I understand it, that in diabetes there is no morbid formation of sugar but only a failure to utilise what is normally made. It is difficult to imagine but that in such cases as I have alluded to we have the making of too much rather than the using of too little. We must have over-production rather than diminished consumption and must look for some morbid exaggeration of the sugar-making process. It seems probable that the part of the tissues is passive rather than active and a morbid glycogenesis, in other words, the excessive making of sugar, the essential part of the disease. As this is often attended with a discharge of sugar more than equivalent to the carbohydrate which in ordinary circumstances we could suppose to be taken up by the tissues we must look for its cause in something more active than a failure on their part to seize the elements of nutrition which are presented to them. We have an active and destructive disease which is difficult to account for by a mere loss of assimilative power on the part of the tissues. We must have the creation of sugar, not the mere misapplication of it.

We fall back on the older view, practically that of Claude Bernard, according to which the immediate cause of glycosuria is in the liver, the remote cause in the brain. Much labour has since the time of Bernard been expended on the physiology of glycogenesis and the pathology of diabetes. Physiologically much has been accomplished, but in the field of pathology it must be admitted that much remains to be done. Not that nothing has been done but our knowledge in this respect is fragmentary and discontinuous: suggestive rather than conclusive. But it is impossible to ignore the connexion of glycosuria with cerebral injuries, of diabetes with mental disturbance, of saccharinity of urine with melancholia, and, to carry on the story after death, of evidences and consequences of vascular repletion especially in the brain in the shape of corpuscular extravasation and in the liver of abnormal congestion. The suggestion which these visible signs convey is of loss of contractile power in the arteries. The vascular leakage is not always to be found and therefore cannot be regarded as a necessary step in the establishment of the disease, but it is found often enough (blood in a recent state outside the vessels in eight of 22 cases) to point a moral and to insinuate that there is something generally abnormal in the pose of the vessels, though it is only in some that it has gone to the length of extravasation. Thus the hæmorrhages by transudation or rupture which are found in tetanus, chorea, and diabetes are not to be regarded as the cause of the symptoms or essential part of the disease but only as indications of some condition which is so. Granting that we have in diabetes signs of want of tone in the arteries, we are not to conclude that we have got to an end but only that we have taken a step in that direction; what it may lead to is as yet unknown. We have not discovered the *primum mobile*. Suspicion points to the brain, and in particular to the cortex and medulla, but we can at present go no further.

It is not to be assumed that diabetes mellitus is always the same disease or always due to the same cause. It may be due, as is now known, to pancreatic mischief. It is in touch with gout, which it sometimes replaces as if it were a form of gout, the articular symptoms absenting themselves in the presence of the glycosuria. Diabetes is often hereditary, as are some diseases which belong to the nervous system and some which do not. We have much to learn about gout and heredity and about the origins and kinds of diabetes; but whatever the future may have in store for us it can never abolish the experimental and clinical facts which associate glycosuria with morbid influences acting by way of the nervous system nor dissociate diabetes from certain disorders undoubtedly pertaining to the same system which, notwithstanding that they were, or still are, by some regarded as "functional," display signs of perivascular disturbance which forbid them to be so regarded if by functional is meant "without material change."

PS.—This paper, not quite a recent production, does not pretend to contain anything new but rather designs to take stock of the old, with such modifications and reassertions as time has made necessary. It is well now and then to look back and see where we stand, while we await further facts which the future cannot fail to provide

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SOME UNUSUAL EFFECTS OF MOVEABLE KIDNEY.

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MOVEABLE kidney is one of those curious affections which sometimes give rise to very serious symptoms and sometimes to none at all, and in which the gravity of the symptoms does not appear to bear any relation to the amount of the movement. It may form a tumour which descends into the iliac fossa whenever the patient stands up or coughs without causing more than a feeling of discomfort; or it may cause very serious consequences from pressing or dragging upon neighbouring structures, even though it scarcely descends sufficiently far below the ribs to be felt. There is a good deal of truth in the saying that a kidney which simply descends behind the peritoneum and fascia which cover it in front may become the seat of hydronephrosis from kinking of the ureter, or of tubercle or calculus from being repeatedly bruised, but it will not, as a rule, interfere with other organs, while one that simply tilts forward without descending to any great extent, even if it is only the upper end that tilts, may lead to very grave inconvenience and give rise to the suspicion that the patient is suffering from disease of some of the neighbouring organs. Fortunately, the diagnosis rarely presents any difficulty. Whatever the nature of the symptoms to which a moveable kidney gives rise, whether they are those of ulcer of the stomach or of gall-stones or of inflammation of the appendix, there is one test which enables the true cause to be distinguished at once and almost without fail. Symptoms that are due to a misplaced kidney are relieved and in most instances disappear entirely as soon as the patient is placed in the recumbent position. When they are due to organic disease of other organs change of position has little or no effect.

In one case under my care a moveable right kidney gave rise to a series of symptoms resembling very closely those ordinarily present in chronic gastric ulcer. The patient was a married woman, 44 years of age, who had had nine children, six of whom were living. For the last 20 years she had suffered from pain in the epigastrium, shooting round to the back and shoulders. The pain invariably came on from a quarter to half an hour after meals. Solid food made it worse, vomiting was frequent and was rather encouraged as it relieved the pain. Scarcely a day passed without at least one attack and for the last nine months there had been no respite. 21 months ago there had been three attacks of hæmatemesis, the amount said to have been as much as three quarts, and there was melæna at the same time. The abdomen was large and flabby. According to the patient's account she had been getting thinner. The stomach was not dilated or displaced, the lower border being situated about two inches above the umbilicus. There was a little tenderness on deep pressure to the right of the epigastrium but no tumour could be felt. Both kidneys were moveable, the right one in particular descending so far when the patient strained or coughed that it came quite below the thorax and the hands could be made to meet above it. While in the ward lying in bed waiting for operation the vomiting, which had been more and more troublesome and which was the immediate cause of her seeking admission, ceased entirely and the pain after food diminished so materially that it scarcely interfered with her comfort. This led me to the conclusion that the mobility of the right kidney was the chief, if not the sole, cause of her symptoms, whether it acted mechanically by dragging upon the duodenum and pylorus or whether it irritated the splanchnics in some way, leading to persistent congestion of the mucous membrane of the stomach with its attendant consequences, chronic gastritis and hæmatemesis. The right kidney accordingly was exposed through an incision in the lumbar region, all the fat around was removed, and three kangaroo-tendon sutures were passed through it, securing it to the wall. Iodoform gauze was packed around the outer border and lower end of the kidney to prevent any strain falling upon the sutures during vomiting and to

secure fixation by adhesion afterwards and the wound was closed. The subsequent progress does not need any description. The patient was kept in bed until the wound was soundly healed and then allowed to get up, wearing an abdominal belt as a precaution. There were occasional attacks of dyspepsia afterwards, but so far as the severe pain and vomiting were concerned relief was complete.

In two other cases under my care about the same time the effect of the displacement of the kidney fell not so much upon the pylorus as upon the gall-bladder and the common bile duct. One of these patients was a young woman, unmarried, 26 years of age. The other was married, with a large family, and probably was a little over 40 years old. The history they gave was practically the same, so far as important details were concerned. In both there had been repeated attacks of colic beginning in the right hypochondrium and resembling mild attacks of biliary colic but bearing little or no relation to food. They did occur after meals, it is true, but they occurred almost as frequently at other times. At night they rarely occurred. In the elder of the two these attacks had lasted a good deal longer and were more severe than in the younger. In her, too, they were often attended by jaundice, which, however, rarely lasted longer than two or three days. Occasionally there was sickness, but it was not sufficiently regular or frequent to enable it to be said that it was dependent upon the colic. There was tenderness in the right hypochondrium in both, especially after one of the attacks. The liver was not enlarged and no tumour could be felt when the patient was lying down. When standing up and leaning forwards, supporting the weight of the upper part of the body upon the hands so that the abdominal muscles were relaxed, a sensation of deep resistance was felt over the region of the gall-bladder, especially in the case of the elder patient, but the gall-bladder could not be defined. The elder of the two volunteered the statement that if she could only get to bed and lie down for a few hours the pain almost ceased and that very often it returned after she had been up some little while. The lower end of the right kidney could easily be felt in both when they were standing upright but it was not moveable in the ordinary sense of the term—that is to say, though it descended distinctly when the patient took a deep breath it resumed its former position as soon as the pressure of the diaphragm was taken off.

All kidneys are moveable. In a good many people the upward and downward range of movement is more than an inch and may be as much as two inches. When such a kidney is placed rather lower down than usual, owing perhaps to a long narrow thorax, it can easily be felt and may be mistaken for a pathologically moveable kidney. This term, however, should be reserved for kidneys which not only descend but which fail to re-ascend spontaneously when the diaphragm relaxes, and which do not regain their natural position unless either the patient lies down or some external pressure is brought to bear upon the abdomen. In neither of these patients was the kidney moveable in this sense, but for all that I have no doubt that it was the cause of the symptoms of which they complained by the way in which it pressed upon the cystic or perhaps the common bile duct. At least it is certain that after the kidney had been exposed and sutured to the posterior wall in the way I have just described they were both completely relieved. The explanation is, I believe, to be found in the kind of movement the kidney undergoes in these cases. In ordinary ones it glides up and down behind the peritoneum and does not come into relation with the bile ducts. In these the lower end appears still to retain what attachments it has and the upper end drops forwards, so that the kidney assumes a horizontal rather than a vertical position. This form of displacement was, I believe, first described by Potain who spoke of it as anteversion of the kidney, and he, too, considered that it was in some way related to what may be called, for the sake of brevity, biliary symptoms. Potain, however, appears to me to have mistaken cause and effect. According to him irritation about the biliary passages leads to a general relaxation of the serous and subserous tissues in their neighbourhood and this in its turn to loosening and displacement forwards of the upper end of the kidney. It seems to me more rational to regard the displacement of the upper end of the kidney as the primary cause and the temporary closure of the bile ducts as the consequence. Cases in which similar symptoms have been caused by complete downward displacement of the kidney have been recorded by Dr. W. Hale White and Mr. W. Arbuthnot Lane,[1] and also by Dr. T. J. Maclagan and Sir Frederick Treves,[2] but, so far as I am aware, no one hitherto has associated them with simple anteversion, a condition which probably is much more common than is usually suspected. I may add that neither of my patients could have been accused of the smallest degree of tight-lacing, which has often had the credit of causing these symptoms, nor was there any suspicion in either of them of general enteroptosis or rotation of the liver.

A third case presenting closely similar features was under my care about the same time. It differed, however, in one important respect, for the kidney was much more moveable and slipped down in the usual way when the patient stood upright and coughed or strained. What the immediate mechanism may have been in this case is not easy to say, for the kidney when it glided down appeared to lose all relation to the biliary ducts. It is possible that there may have been some adhesions between the gall-bladder, on the one side and the hepatic flexure of the colon and the other structures, which must be displaced to some extent when the kidney descends, but the patient refused operation so that I am not able to speak more definitely.

Inflammation of the appendix is another trouble which I have known on several occasions to be simulated very closely by moveable kidney. A short time since a patient, a young woman, unmarried, 24 years of age, was sent to me because of a swelling which had made its appearance in the right iliac fossa. It had been diagnosed quite correctly as a moveable kidney but the symptoms of which she complained bore no relation whatever to the kidney but were exactly those which are present in an ordinary case of mild inflammation of the appendix. Whether she had been reading the subject up or comparing notes with friends who had suffered from genuine inflammation I cannot say, but the recurrent attacks of colic, with constipation and abdominal tenderness, brought on by exercise or by trivial indiscretion in diet, were so accurately described that I was led to examine her appendix and found it perfectly healthy. Instead of removing it I proceeded at once to suture her kidney into its place and from that date the symptoms disappeared. In connexion with this case I may mention that on another occasion I removed a calculus, fixed in the cortex at the lower end of the right kidney, in a man who had already had his appendix removed for recurrent attacks of colic without experiencing the slightest relief. What may have been the condition of the appendix at the time of the operation I cannot, of course, say, but certainly the pain which led the man to undergo both operations was due to the calculus, for it was not benefited by the first and was completely removed by the second.

The difficulty of forming an accurate diagnosis in these cases is made considerably greater by the well-known fact that moveable kidney and inflammation of the appendix are not infrequently associated together. So commonly, in fact, do they occur together that it has been suggested that there must be some causal connexion between the two. The reason that is usually assigned is the pressure of the displaced kidney upon the mesenteric veins. This would lead to chronic congestion of the mucous membrane of the appendix and would in this way render it more susceptible to the septic organisms which are the immediate cause of all such attacks. But I am not aware of any case in which this has been proved and as a rule the kidney, when it comes down sufficiently far to press upon the mesenteric veins, enjoys such a range and such freedom of movement that it would be hardly likely to press upon them for a sufficient length of time to produce this result.

There is no doubt that moveable kidney is a much more common affection than is usually believed. It has been said, and it is probably correct, that the range of mobility is pathological in 10 per cent. of women. In a very large proportion of these cases the patient knows nothing about it and should be left in happy ignorance of it. It causes no symptoms worth mentioning and needs no treatment. But there is a small percentage, amounting, however, in the aggregate to a very large number, of which this is not true. Independently of what may be considered to be subjective symptoms they suffer very commonly from gastric and other

[1] Brit. Med. Jour., 1892, vol. i., p. 223.
[2] THE LANCET, Jan. 6th, 1900, p. 15.

troubles, which are often put down to simple dyspepsia, but which I cannot help thinking are in many cases due either to complete displacement of the kidney or to that much more insidious anteversion which can only be ascertained by examining the patient in the position I have described. Such cases can be cured by early operation.

Unfortunately, if matters are allowed to drift on, definite organic changes may be induced, either directly in the structures concerned or indirectly through the medium of the nervous system and these may perpetuate the symptoms, even after the original exciting cause has been removed.

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ANKYLOSTOMIASIS IN WESTPHALIA, HUNGARY, AND CORNWALL.

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FOUR months ago, in conjunction with Mr. Hermann Belger of the Durham College of Science, I visited the coalfields of Westphalia and Hungary with the object of studying ankylostomiasis, of learning something of the social, industrial, and medical conditions under which mining operations are conducted there, and of contrasting these with those found in Cornwall.

We chose Bochum in Westphalia as our vantage-ground, for not only is it the most important mining centre of Westphalia, also that where the disease commenced and has been most severe, but it is here that Dr. Tenholt lives who is recognised as the principal authority on ankylostomiasis in Germany and who is the medical head of the Knappschaftsverein, or Miners' Assurance Union, with its 265,000 members. At the Elizabeth Hospital, Bochum (400 beds) on the date of our visit there were 30 patients in the institution suffering from the "worm disease" and of these 19 were convalescent. The men who are afflicted with this malady are kept in a part of the building separate from that reserved for the other patients; they have their own set of lavatories with annexa for the examination of fæces. Dr. Nagel is in charge of the bacteriological laboratory at the Elizabeth Hospital. Here we were joined by Dr. Tenholt. It is at the Elizabeth Hospital that the most important pathological investigations are carried on. Courses of clinical and pathological instruction are given in the hospital by Dr. Tenholt and Dr. Nagel. The former has already had through his hands 300 young practitioners who, after their special training, have been sent to the mining districts to combat the disease. In our visits to the Lothringen and Erin mines in the neighbourhood of Bochum we had the privilege and the pleasure of Dr. Tenholt's company and I take this opportunity of thanking him through THE LANCET for his valuable assistance ungrudgingly given.

It is impossible otherwise than to admire the well-thought-out plans and the means adopted by the German Government and the Miners' Association to stamp out the disease. Before a new workman is taken on at any mine in Westphalia he must proceed to one of the hospitals, defecate there, have his stool microscopically examined, and receive a certificate of health from the medical officer, and for this the miner pays 1s. It has been found necessary to make the miners pay for the medical certificate as it prevents them moving about from one mine to another; also the authorities have been obliged to enforce personal attendance at a hospital of the applicants for work, as the men used to bring for microscopical examination not their own but the fæces of their wives and children.

The spread of ankylostomiasis through Westphalia is attributed to the rapid opening out of the mines during the last few years. So great was the demand for coal a short while ago that in one year 20,000 new miners had to be introduced into Westphalia. These men came from Posen in East Germany, Poland, and Italy. At the present time Italian miners, if they pass the medical officer, are accepted but Hungarian miners are not engaged upon any condition. How the disease was imported into Westphalia it is difficult to say but it has been an expensive item for this part of Germany. Ankylostomiasis has cost the Miners' Association little short of £200,000. For each report of a case of ankylostomiasis furnished by a medical man the association pays 1s. This includes payment for a microscopical examination of the stools which in all instances must be made. One medical man examined 8000 cases a short while ago and received £400 for examining and reporting upon the same. Owing to the Westphalian mines containing a good deal of coal dust and explosive gases spraying with water was made compulsory by the Government three or four years ago. Since watering the mines the number of cases of ankylostomiasis has materially increased. According to the *Deutsche Bergarbeiter-Zeitung* the number of miners in the valley of the Ruhr—i.e., the district above mentioned—who have suffered from ankylostomiasis is as follows:—

1896	1897	1898	1899	1900	1901	1902
107	113	99	94	275	1130	1355

As a supplement to this I reproduce in full the table which appears in the report on ankylostomiasis of the Special Commissioner appointed by the *Colliery Guardian* and published in 1903, an excellent report, by the way, and one full of interesting information. The total staff employed in the 289 mines in the district in 1902 was 256.000.

Year.	Number of pits infected.	Number of cases reported.	Proportion of cases per 10,000 miners in work.
1896	15	107	6·4
1897	31	113	6·2
1898	23	99	4·9
1899	26	94	4·4
1900	40	275	11·7
1901	63	1030	40·6
1902	66	1355	52·9

It was in 1900 that compulsory regulations for watering mines in Germany were introduced. The sudden rise in the returns of cases about this time is more than a coincidence. As indicating a causal connexion between sprinkling the workings in the mine with water and ankylostomiasis the figures published by the Miners' Association are of importance. In 1901 of 63 infected pits there were 57 in which spraying with water was being carried on and in these there were 1021 cases of ankylostomiasis, while in other six infected but unwatered pits there were only nine cases of the disease.

In 1902 the number of men suffering from ankylostomiasis in Westphalia was simply alarming: in the Erin coal mine there were in 1902 297 patients, in Graf Schwerin 296, and in the Shamrock pit 258.

At the Lothringen mine there are at present 2000 men employed, of whom 1600 work underground. Ankylostomiasis broke out here in 1885. Two years ago 72 per cent. of the men working underground were suffering from the miner's worm disease; to-day only 8 per cent. Down the pit I found every 300 yards or thereabouts earth closets or portable pails for the use of the miners. These pails which were made of galvanised iron were found usually in very accessible places, were surrounded by sacking and thus were partly screened from view. At other places these pails were placed in recesses in the rock and screened off by sacking. The ground immediately around was strewn with lime and crushed stone. Here and there by the side of the main ways in the mine were pools of stagnant water or heaps of slimy mud rich in the ova and larvæ of the ankylostoma duodenale. The larvæ of this intestinal parasite attack the timber props of the mine, causing them to be wet and to become rotten. According to Dr. Tenholt the larvæ seldom ascend higher in the wooden props than one yard from the ground. In one of the sideways in the mine which was infested with the larvæ we had the opportuity of seeing some experiments carried out by Dr. Tenholt—viz., sprinkling the mine with a watery solution of quicklime. Preparatory to this being undertaken infected miners were asked to defecate in this particular gallery, the temperature of which is rather high, and in 14 days owing to the favourable temperature the ova had become changed into larvæ. This is the average length of time in the mine for the development to occur.

At this point I may incidentally remark, since I shall not

be dealing with the life-history of the worm, that it is only the larvæ and not the ova that in the human intestine are capable of developing into the worm. The ovum requires free oxygen and this it does not obtain apparently in the alimentary canal. Another interesting point, too, is that the ovum of the ankylostoma requires a temperature of 25° C. or 68° F. for its development. Several of the Westphalian mine owners have so improved the ventilation of their pits that through having reduced the temperature alone they have practically freed the mines from ankylostomiasis.

At the Erin pit, Gastrop, I was particularly struck by the excellent bathrooms, dressing room, and suite of water-closets for the underground workers. In the hospital or barracks at the Erin mine there were on the day of our visit 25 men under treatment for ankylostomiasis. Some of the men did not look at all ill. Only one man was strikingly anæmic. It is one of the peculiarities of ankylostomiasis that the symptoms do not always correspond with the amount of infection. Yet it is the men with few or no symptoms who do harm by transmitting the disease to others. The hospital at the Erin mine costs the employers about £100 a month.

To diagnose ankylostomiasis the fæces of a suspected miner must be examined microscopically. Ova and larvæ are being constantly passed in the stools of an infected individual, but the fully developed worms are only expelled after an anthelmintic. Want of space will not permit of my dealing with the methods of prevention and cure of the disease as seen in Germany other than stating that so far as medicinal treatment is concerned the drug relied upon by Dr. Tenholt is filix mas in large doses. On a few occasions, however, rather serious symptoms have followed the administration of large doses of filix mas. It caused neuro-retinitis followed by blindness.

HUNGARIAN COALFIELDS.

We visited the Sopron-Brennberg mine where we were the guests of Dr. Goldman, to whom we take this opportunity of acknowledging our indebtedness and of tendering our thanks. As Dr. Goldman is an enthusiast and has contributed largely to the literature of ankylostomiasis his views upon the subject have been most heipful to us. In the Sopron mine, in which 800 men are employed, the temperature runs very high, sometimes from 40° to 45° C. (104° to 113° F.). The temperature of this coal mine is very favourable to the development of ankylostomiasis. Seven years ago from 90 to 95 per cent. of the miners were affected: to-day there are still about 30 per cent. of the men who are not yet free from the parasite. A few years ago the miners were so ill and so anæmic that they could not work. Their feet used to swell and they could undergo no physical exertion without panting for breath and having palpitation. It is with ankylostomiasis as with many epidemics. When the disease first appears in a district it is usually extremely virulent and is attended by rather serious symptoms, but as time passes, although the malady may to some extent unfit many of the miners for work, a kind of tolerance seems to be established. There is a sick fund at the Sopron mine with a capital of £30,000. Out of this fund pensions are paid to aged and disabled miners and for all kinds of sickness. The owners contribute £1400 a year to it, and the men in proportion to their wages. During sickness the fund pays 1*s.* per day to the family and in cases of ankylostomiasis it pays in addition all hospital expenses.

The miners are underground for eight hours a day but out of this, owing to the very high temperature of the pit, they can only work four hours. So overpowering is the heat that the men are obliged to leave the workings and go into the main ways to become cooled and to get air. Half the time is thus spent in cooling themselves and resting. In consequence of the high temperature, the character of the work, and the difficulty of breathing the men develop acute pulmonary emphysema. As the work is hard and the men perspire freely an intense thirst is developed which is quenched by drinking large quantities of water containing 1 per cent. of citric acid. Boys in couples with water barrels on their back keep travelling up and down the mine. On an average a miner drinks five litres of the acidified water daily. Notwithstanding their hard work many of the miners at Sopron-Brennberg are long lived. They are superannuated at a, comparatively speaking, early age. Very few of the miners die from phthisis. A large proportion of them are pale and worn-out looking and while part of this may be due to ankylostomiasis the hard character of their work and the high temperature and impure air of the pit are not without an influence. At the Sopron mine there is great difficulty in getting the men to use the iron pails provided for them underground. Dr. Goldman suggested moveable waterclosets on wagons which could be transported on the rails anywhere through the mines, but they are not in use.

A short distance from the mine is the hospital with 12 beds but with accommodation for 24 when required. Here I examined six men who were suffering from ankylostomiasis. The patients at Sopron-Brennberg looked worse than the men at the mines near Bochum. Three of them were very anæmic and looked ill. They could not eat and were unable to walk far, partly on account of palpitation and shortness of breath and also on account of the heaviness of their limbs. In three of the patients there were signs of emphysema of the lungs. One man in addition was suffering from aortic regurgitation and pulmonary emphysema. We washed the fæces of one man who had been put on treatment that forenoon. 70 worms were found; several of these were pale and dead while others were red and gorged with blood. On microscopical examination there could be seen both fertilised and unfertilised ova in some of the female worms. Last year there were 400 cases of ankylostomiasis treated at the Sopron-Brennberg hospital at a cost of £150 to the mine owners.

Treatment.—A variety of drugs has been tried by Dr. Goldman, including filix mas, thymol, terpine, and an extract of acacia anthelmintica which has a reputation in Abyssinia as a vermifuge. He is still experimenting with drugs.

CORNWALL.

In this country ankylostomiasis has made its appearance in at least one mine, the Dolcoath, near Camborne. Through the kindness of the manager, Mr. R. Thomas, I had the opportunity a few months ago not only of descending into the mine and of seeing something of the conditions under which the men work in this deep metalliferous mine but also of examining some of the men who had been, or were still, suffering from ankylostomiasis. In the mine iron pails are provided for the use of the men and these, as in Westphalia, are brought to the surface and emptied daily. It is difficult to say how ankylostomiasis was introduced into Dolcoath but as there has always been a free interchange of miners between Dolcoath, the colonies, and foreign countries the worm must have been brought to it by workmen coming from abroad. To the account of the disease as at present existing in Cornwall there is little to add to that given by Dr. J. S. Haldane. A few years ago, more than now, there was a good deal of ill-health among the Dolcoath miners and a feeling of unfitness for work was very prevalent. Much of this was attributed, Mr. Thomas tells me, to the high temperature of the mine but on looking back the manager is disposed to think it may have been the result of ankylostomiasis and that the disease therefore must have existed here some time before it was recognised. The medicinal treatment adopted is large doses of thymol and from it good results have been obtained.

In reviewing the subject of ankylostomiasis generally it is apparent that the disease is always introduced into a district by an infected miner defecating in a mine the temperature of which is fairly high—say, above 65° F.—and in which there is considerable moisture. In these circumstances the ova which are dejected in the fæces find a favourable medium for becoming larvæ. Occasionally through eating with unwashed hands the larvæ gain entrance into the alimentary canal of man and there develop into mature worms; but there is another channel by which they gain entrance and that is, as Dr. Looss of Cairo has shown, through the skin. Dr. Looss's carefully prepared microscopical sections have quite set at rest any doubt upon this point. Facts both at home and abroad show that the disease develops very insidiously, that infected men may be working a few years in a mine before it becomes infected, and then all at once the disease breaks out in epidemic form. So far the great coalfields in the north of England are not known to be affected. To some extent they are protected by their excellent system of ventilation and low temperature but in one mine in Hungary with a temperature of 48° F. ankylostomiasis broke out.

No diagnosis of miners' worm disease can be made short of finding on microscopical examination the ova in the fæces and as there are often therein numerous ova of other intestinal parasites it requires some knowledge and familiarity with the various forms of ova in order to differentiate

between them. The blood of an infected individual usually shows an increase of eosinophile corpuscles but as eosinophilia is met with under other pathological conditions neither this circumstance nor that of a deficiency of hæmoglobin in the blood can do more than point to the necessity of making a microscopical examination of the fæces. Dr. A. E. Boycott regards eosinophilia in a coal miner as extremely suggestive of ankylostomiasis. In the case of a workman from abroad applying for work at a British mine, especially metalliferous, and with a temperature above 65° F., inquiries should be directed as to where he has come from and if known to be an infected area it would be safer before giving him work to have his fæces microscopically examined.

Newcastle-upon-Tyne.

A CASE OF EXTRADURAL ABSCESS COMPLICATING ACUTE MIDDLE-EAR CATARRH WITHOUT PERFORATION OF THE MEMBRANA TYMPANI; OPERATION; RECOVERY.

BY R. G. HENDERSON, M.A., M.B., CH.B. ABERD., F.R.C.S. EDIN.

CASES of the following type are of sufficient interest and importance to be put on record, for the whole issue depends on their prompt recognition and treatment.

A little girl, aged seven years, had an attack of earache on Sept. 9th, 1901. She was not a robust child, being subject to occasional attacks of bronchitis and about a year before had passed through an attack of pneumonia. She had never suffered from earache before and I was not asked to see her till the 12th. She then appeared to be suffering from a subacute middle-ear catarrh on the left side and was treated with sedative drops (carbolic acid and opium in glycerine), hot fomentations, and an aperient. The throat appeared to be normal and the temperature was normal or only slightly raised. The next few days showed little change in her condition except that while the earache improved somewhat she became subject to considerable pain of a neuralgic character over the left side of the head and especially the left side of the forehead. Meanwhile, the temperature ranged from normal to 100·4° F. On the 17th there were considerable pain over the parietal region and diffuse tenderness on both parietal and occipital regions of the left side; there was tenderness also over the mastoid process but no redness or swelling. The head was held stiffly inclined towards the left shoulder and she would lie only on the left side with the head supported on a low pillow. The temperature was 100·2°. She had slept well. There was no pain in the ear itself. Hearing was considerably impaired, showing $\frac{5}{15}$ by the watch, the other ear being normal. The meatus was somewhat narrowed and the membrana tympani was grey and opaque. There were no bulging and no perforation to be seen. There was no history of discharge from the ear or any sign of such in the meatus. The hair was cut over the whole of the left side, revealing some swelling below and behind the tip of the mastoid and extending up and back to the parietal region. The tenderness although present over the whole side of the head was most marked over the tip of the mastoid and the swelling below it. On the 18th she was seen by Dr. T. E. Hayward in consultation. The child had passed a good night and was found sitting up in bed amusing herself. Her temperature was 100° and her pulse was 140. Pain was much less than before and there was only some dull aching over the side of the head. The swelling was more marked; it was somewhat sausage-shaped and extended from below the tip of the mastoid up and back to the parieto-occipital region; the upper part was the most prominent and showed fluctuation, its centre being two inches behind the attachment of the auricle and on a level with its upper border. Tenderness was more or less present over the whole side of the head but most marked over the tip of the mastoid and over the fluctuating area referred to. On the 19th she passed a restless night and looked less lively. Her temperature was 99·5° and her pulse was 120. Slight wheezing bronchitis was present. There had been no vomiting or rigor and no mental dulness. The headache and the swelling were as before, only the latter had extended so that there was now some œdema over the mastoid. The hearing power in the left ear had diminished, the watch being heard only on contact. The meatus was much swollen deeply so that the membrana could hardly be seen. The pupils were normal. There was no optic neuritis. On the 20th the patient had chloroform administered by Dr. Hayward and the abscess was opened by a vertical incision through its lower part. Non-fœtid pus escaped. The abscess was sub-pericranial and the bone appeared to be normal. Careful search was made for a track leading towards the tip of the mastoid on the supposition that there might be an unusual form of Bezold's perforation with the pus tracking up and back along the digastric groove instead of following its more usual course down the neck. No such track, however, was found. The mastoid antrum was then opened in the usual manner with the chisel and while doing so a minute opening was made into the groove for the lateral sinus. A tiny jet of pus immediately spouted forth evidently under considerable pressure and continued to flow in a pulsating stream synchronous with the heart beats. As the abscess emptied itself the wall of the sinus rose up close to the bone. The aperture was enlarged and with due precautions the portion of bone overlying the abscess was completely removed with the chisel. Thus the sinus was laid bare over an oval area rather larger than a shilling. The sinus wall looked congested and thickened but no lymph or granulation was present. The antrum contained no pus. Drainage was provided by strips of gauze introduced under the bridge of the scalp between the mastoid incision and that for the abscess. The subsequent progress of the case was uneventful. The temperature fell to normal within 48 hours and healing was complete within six weeks, when hearing power was found to be equal in both ears and bony repair had taken place over the exposed sinus.

That intracranial complications, and especially extradural abscess, may follow an acute otitis media is a well-recognised fact, but in the great majority of such cases the otitis has reached the suppurative stage and resulted in a perforation of the membrana tympani. Unfortunately, in the present case none of the pus was preserved for bacteriological examination, but the clinical features are strongly suggestive of the pneumococcus as the cause. Leutert has shown that the type of otitis media associated with the pneumococcus is characterised by a somewhat mild course as regards the ear itself but with a marked tendency to the production of extradural abscess. The probability here is further increased by the fact that the patient had passed through an attack of pneumonia within the last year so that doubtless a potential source of otitic infection was still present in her respiratory tract. A pneumococcic infection will sometimes resolve and sometimes suppurate, the result depending largely on the vascularity and general vitality of the tissue attacked. Thus in the lung resolution is the rule, but in the pleural sac suppuration frequently follows, particularly in children. If we now regard the middle ear with its attic, antrum, and mastoid cells as the analogue of the lobule of lung with its air vesicles, it is evident that in a middle-ear catarrh with extradural abscess we have a process closely comparable with a pneumonia and its subsequent empyema.

Of greater practical importance, however, is the question of diagnosis, especially so in acute cases, as the condition is then so much more likely to be overlooked. An extradural abscess uncomplicated by other intracranial affection may present a variety of symptoms such as severe pain, high fever, vomiting, optic neuritis, and, if large, pressure symptoms such as various paralyses, slow cerebration, and coma. We may even find repeated severe rigors with high temperature due to simple extra-sinus abscess, without sinus thrombosis as in cases recorded by Barr. On the other hand, any one or practically every one of those symptoms may be absent. Two features, however, of special diagnostic value, both illustrated in the above case, may be mentioned. The first and most suggestive, as shown by Grunert, is the marked incongruity between the subjective symptoms and the objective ear condition—e.g., severe pain in the ear or over the side of the head but with no acute inflammatory signs on the membrana tympani or mastoid process. The second is the formation of an abscess under the scalp the origin of which can only be explained on the supposition that it has found its way from the interior of the skull. The diagnostic value of this sub-pericranial abscess receives little attention in English text-books of otology. Possibly its occurrence is rare but in a case like the present where the membrana tympani is intact its presence affords

the only direct evidence of intracranial suppuration. As to the treatment little need be said. The obvious indication is to evacuate the pus and to provide free drainage by operative means.

Subsequent note.—The patient made an excellent recovery from the operation and was quite well for a year after. I was then asked to see her again. She was suffering from slight earache and had an abscess of considerable size over the mastoid, raising up the linear scar of the old operation wound. There was but little discomfort referred to the ear itself and there was no perforation or discharge. I carefully cleaned the skin over the abscess and with due precautions withdrew a sample of the pus for bacteriological examination. It was reported to contain pneumococci. The abscess was opened and healed readily. I have reason to know that the patient remained in good health for about two years afterwards. Her medical history then showed the following interesting sequence of events occurring at intervals of a year: (1) an attack of pneumonia of moderate severity (September, 1900); (2) an attack of acute catarrh of the middle ear with extradural abscess having the clinical characters of a pneumococcic infection as detailed above (September, 1901); and (3) slight earache with large abscess over the mastoid of pneumococcal origin and evidently due to infection through the middle ear and antrum (October, 1902). Apart from the interest of the individual manifestations this history shows the remarkable tendency to recurrence of pneumococcal infection or perhaps more correctly the persistence of the infection in a latent form with periodical outbreaks.

Oldham.

NOTE ON MERCURIAL INJECTIONS IN NERVOUS DISEASES OF SYPHILITIC ORIGIN.[1]

BY DR. MAURICE FAURE,
LA MALOU.

(*Translated for* THE LANCET.)

PERSONS suffering from nervous diseases are very sensitive to certain methods of medical treatment and the generally accepted restrictions with respect to the use of mercurial remedies are specially applicable to such patients. I will here detail in a collective form some of these restrictions, the soundness of which has, in my estimation, been confirmed by prolonged observation of a large number of patients presenting nervous symptoms of syphilitic origin.

Injections of soluble salts (Note 1) given either every day or three times a week are the most recommendable form of treatment, for in this way the amounts administered can be determined with more precision than by other methods. Pills and other preparations to be swallowed often produce, even when taken in small quantities, intestinal troubles in nervous disease. With inunction (*frictions*), grey oil, and injections of insoluble salts it cannot be exactly known how much of the remedy has been absorbed and in what space of time. This being so, the patient's general state may, when the limit of toleration has been exceeded, undergo a sudden and transient deterioration, leaving behind it a long-continued aggravation of the nervous troubles, the relief of which was hoped for. It is desirable to avoid routine practice and the giving of the same mercurial salt to all patients suffering from nervous diseases. In the selection of a method of treatment the medical man ought to be guided not by his preconceived ideas but by prolonged observation of the patient. Individual idiosyncrasies with respect to toleration ought to be ascertained. In general, the familiar preparations of benzoate, biniodide, and perchloride of mercury agree well when given in ordinary doses, while cacodylate, hermophenyl, and other organic compounds agree even better but seem to be less active in equivalent doses (Note 2) and may be reserved for delicate patients. By varying the nature as well as the doses of the salts administered remedies which cannot be tolerated continuously may be tolerated for a limited time (Note 3).

The therapeutic result is not proportionate to the quantity of mercury administered, some preparations being more active than others. Two facts may here be mentioned—namely, (1) that patients who have not derived any benefit from a given preparation or from small doses have improved under the use of another preparation or of larger doses; and (2) that patients who have become worse when treated with a certain salt or with large doses have improved when a different salt or small doses were substituted (Note 4).

In the case of a young patient suffering from nervous disease whose general state is in other respects normal and in whom the lesion is recent and quite local (a gumma, for instance) mercurial treatment may be used with the same intensity as in any syphilitic manifestation whatever. With middle-aged patients not in very good condition and having disseminated lesions (such as disease of the cerebro-spinal vessels, tabes, and general paralysis) mercurial treatment ought to be commenced cautiously and watched with close attention. Moreover, the patient might have secondary infections of certain viscera, such as the bladder or intestines, associated with paralysis or atony of the organs in question. Though these conditions are of infective origin mercury has no remedial action on them and the temporary lowering of the general health which a too energetic mercurial treatment may bring about renders these infective processes more active. With elderly persons presenting nervous symptoms of syphilitic origin greater circumspection is required; the state of the kidneys must be carefully investigated by means of a complete analysis of the urine and observation of the renal efficiency.

The duration of the treatment and the doses employed will naturally depend on the effect produced, on the state of the patient, on the special object in view, and the like; they cannot be pre-arranged on a uniform system for all cases. These precautions, the greater part of which are to be found in the teaching of Fournier, are the best guarantee of therapeutic success. After having been for a long time employed in an inadequate manner for the relief of nervous symptoms of syphilitic origin mercurial treatment is at present often carried on more actively than is good for patients suffering from nervous diseases. It is desirable that these extremes should be avoided and that preparations and doses conforming to each individual's powers of resistance should be selected in order to insure the success of mercurial treatment in nervous diseases of syphilitic origin.

Note 1.—All our injections are intra-muscular. When this plan is adopted there is little or no induration and pain is of exceptional occurrence. The injection ought to be given very slowly and followed by gentle massage. The place for injection is the buttock and the average depth is four centimetres.

Note 2.—The equivalence of doses in the case of different salts is ascertained from the amount of mercury in each salt, assuming, of course, that the chemical valency of the mercury is the same in the groups which are compared. A centigramme of mercury per day is the average dose; there are patients who cannot take so much but many can take more than that.

Note 3.—Our series of injections of soluble salts vary from 6 to 20 administrations. The series is repeated after a pause of equal duration to make up a total of from 40 to 80 injections for a course of treatment to be spread over one or two years. With insoluble salts we have made weekly injections numbering from 6 to 12, and after an interval of some weeks another series is recommenced. There is no definite limit except the tolerance of the patient.

Note 4.—An intensive treatment is not necessarily a heroic treatment, for intensity may be obtained insidiously by very prolonged administration and the use of average doses frequently repeated. It is necessary to give the patient all the mercury that is required for the cure of the disease without giving him enough to produce toxic symptoms.

[1] A communication to the Seventh French Congress of Medicine, Oct. 24th to 27th, 1904.

DIPHTHERIA IN BRADFORD.—Dr. W. Arnold Evans, medical officer of health of Bradford, in a report on the prevalence of diphtheria presented to the health committee of that city, states that the disease showed a gradual increase during the period from 1900 to 1903, followed by a remarkable rise in 1904. In 1903 there were 196 cases, with 52 deaths, while for the ten months up to the end of October, 1904, there have been 678 cases with 119 deaths. By far the larger number—namely, 517 cases out of the 678—occurred in children between three and 13 years of age. The children attending St. Stephen's schools in West Bowling have been especially liable to be attacked.

A CURIOUS CASE OF GENERAL TUBERCULOSIS IN WHICH A COMPLETE CAST OF THE STOMACH WAS VOMITED.

BY EDWARD SWALES, M.R.C.S. ENG., L.R.C.P. LOND.,
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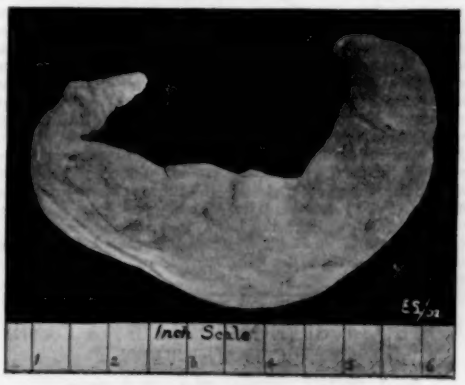
IN the following case, which came under my care in February, 1902, the patient was a male epileptic imbecile, aged 16 years. On April 7th he refused his food and appeared to be very ill. He was put to bed immediately and his temperature was found to be 103·6° F. On a most careful examination of the chest and abdomen being made no physical signs of disease were discovered. A saline draught (sulphate of magnesium, one ounce; tincture of senna, half a drachm; and water, two ounces) was given to relieve the constipation and the diet was limited to milk and soda-water. At 6 P.M. the temperature had risen to 105·6°. He was therefore wrapped in a sheet wrung out of tepid water and the temperature was carefully taken at regular intervals. The wet pack was continued until the temperature had fallen to 103° (the temperature in every case being taken in the rectum), which occurred in one and a half hours. During this time small draughts of whisky and water were given to support the heart, which was beating very rapidly (from 120 to 130 per minute) and to induce diaphoresis. He was now removed from the wet pack and put into dry clothing when he fell asleep immediately. He slept quietly for three hours, after which he became restless and fretful. By 2 A.M. on the 8th the temperature had again risen to 105°. The mixture which he was taking at this time was the following: sulphate of quinine, one drachm; phenazonum, two drachms; spirits of chloroform, three drachms; and water to 12 ounces; one ounce every four hours. At 10 A.M. the temperature was only 100·8° but at 6 P.M. it had again risen to 104·2°. From the accompanying chart (Fig. 1) it will be seen that the temperature had taken on an oscillating character but with no regularity or periodicity. On again examining the chest I found a patch of dulness of about the size of the palm of the hand, posteriorly on the left side, at the level of the angle of the scapula. The breath sounds, vocal fremitus, and vocal resonance were all increased over this area and a few fine "hair-like" crepitations were distinctly audible at this spot.

On the morning of the 12th he was much weaker and vomited for the first time since taking to bed, the vomit consisting of a complete cast of the stomach. The cast was composed of curdled milk. The accompanying photograph (Fig. 2) was taken immediately and before any shrinking had taken place. Its size is indicated by an inch scale photographed with the specimen. The temperature still kept very high and reached a maximum on the 14th (106·2°), when he died.

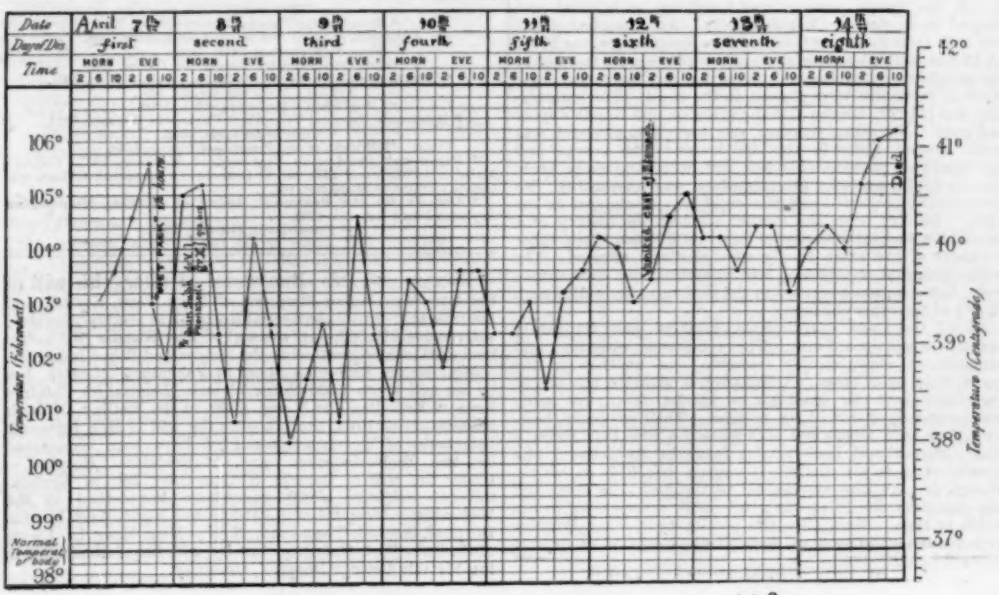
FIG. 2.



Complete cast of stomach.

The following notes are from the post-mortem report of the case. The membranes of the brain were very deeply congested and many small opaque spots (miliary tubercles) were scattered over the surface of the arachnoid, more especially at the base. The brain substance was shrunken and very soft. The vessels were markedly injected. The ventricles contained some excess of slightly turbid fluid. The cerebellum, pons Varolii, medulla, and basic ganglia were similar in every respect to the cerebrum. There was no excess of fluid in the pleural cavity. The whole substance of the lungs was in a condition of extreme congestion and presented many small areas of a darker colour and of

FIG. 1.



denser consistence than the surrounding lung tissue. The left lung was in precisely the same condition, but presented one large patch of pneumonic consolidation on the posterior aspect of the lower lobe. The pericardium was intensely injected and contained about two ounces of clear fluid. The muscular substance of the heart was very soft, pale, and swollen. The peritoneum was injected and many miliary tubercles were scattered over the surface of the intestines. There was no excess of fluid in the peritoneal cavity, the exudation being of a sticky consistence. The intestines themselves were matted together, owing to previous peritonitis, and could not easily be separated. The stomach was quite normal in appearance. The liver was soft, swollen, and very pale. The spleen and the pancreas were both enlarged and congested. The kidneys were very pale and granular; the right one contained a small abscess, probably from infarction. The bladder was normal.

The weights of the various organs were as follows:—Cerebrum, 39 ounces; cerebellum, 5½ ounces; pons and medulla, 1 ounce; right lung, 15 ounces; left lung, 12½ ounces; heart, 7¼ ounces; liver, 53 ounces; spleen, 9 ounces; right kidney, 4¼ ounces; and left kidney, 4¼ ounces.

I am indebted to Dr. F. Pritchard Davies, late superintendent of the asylum, for permission to publish this case.

West Kirby, Cheshire.

MORBILLI SINE MORBILLIS: A CASE WITH COMMENTARY.

BY J. D. ROLLESTON, M.A., M.D. OXON.,
ASSISTANT MEDICAL OFFICER AT THE GROVE FEVER HOSPITAL OF THE METROPOLITAN ASYLUMS BOARD.

A GIRL, aged five years, was admitted to hospital with scarlet fever on Sept. 17th, 1904. She had been ill for three days. The rash, which was fading on admission, had entirely disappeared by the 19th. Characteristic desquamation followed. Beyond a faint trace of albumin present in the urine on Oct. 17th nothing noteworthy occurred till the 26th when the temperature, which had hitherto been normal, rose at 8 P.M. to 99° F. and at midnight to 99·6°. The following day she vomited, an erythema appeared on the body, and the fauces and soft palate were injected. The temperature at 8 P.M. was 102°. During the night she coughed several times. On the 28th the rash had faded but the pyrexia persisted; the morning temperature was 100·2° and the evening temperature was 101°. Nothing fresh was noted on the 29th. The temperature was still slightly raised (in the morning it was 99·8° and in the evening 100°) and the cough continued to be frequent. On the 30th at 2 P.M. the buccal mucosa was found to be injected and showed three definite Koplik's spots. An urticarial wheal was seen close to the umbilicus. The temperature was 100°. At 11 P.M. several urticarial wheals were seen on the trunk, the cough was troublesome, there was profuse coryza, and signs of bronchitis were present in the chest. The temperature was 101·2°. On the 31st the urticaria and Koplik's spots had gone. No other eruption was seen though search was made several times in the 24 hours. The coryza and the bronchitis persisted till Nov. 3rd, when the temperature became finally settled. Convalescence was uneventful. No desquamation followed and the child was discharged on the 18th. Inquiry from the mother elicited the history of a previous attack of measles in July, 1903, when three other members of the same family were similarly affected. The rash, catarrhal symptoms, and constitutional disturbance were, however, more marked in the patient under notice than in any of the other children.

Of all the acute exanthemata, measles least frequently assumes anomalous forms. The symptoms, eruption, and temperature curve closely resemble one another in the great majority of cases. Attenuated or abortive attacks, so frequently seen in small-pox or scarlet fever, are much less commonly met with in measles. Their existence, however, has been recognised ever since the time that morbilli was differentiated from scarlet fever by Sydenham[1] who speaks of a febris morbillosa raging in 1674 in which, though the eruption was limited to the back, the neck, and the shoulders, the fever was much more serious than in the ordinary type. Since then the possibility of a non-eruptive measles under the name of morbilli sine morbillis or rubeola sine exanthemate, has been admitted by the majority of writers—e.g., Rilliet and Barthez,[2] Hebra,[3] Erasmus Wilson[4] in the earlier part of the nineteenth century, and by Kaposi,[5] Osler,[6] Dawson Williams,[7] and Caiger,[8] in more recent times. Willan, the father of English dermatology, was the first to describe a rubeola sine catarrho "in which the course and appearance of the eruption was the same as in R. vulgaris but no catarrh, ophthalmia, or fever accompanies it."[9] Many subsequent writers, including such eminent clinicians as Graves[10] and Sir Thomas Watson[11] have confirmed Willan's description. Authorities of weight,[12] however, have not been wanting to deny or to doubt the specific nature of morbilli sine morbillis as well as of rubeola sine catarrho, nor, indeed, can they be effectually silenced until the discovery of the micro-organism of measles is made and its constant presence in these larval forms is established.

In the present case the diagnosis was based on the occurrence of several other cases of measles in the same ward and the presence of catarrhal symptoms, pyrexia, Koplik's spots, and the prodromal erythematous and urticarial eruptions.[13] The erythema was at first taken to indicate a relapse of scarlet fever owing to its appearance preceding the catarrhal symptoms, its association with the injection of the fauces and soft palate (morbillary enanthem), and the occurrence of vomiting, which more often precedes scarlet fever than any of the other eruptive fevers. The mistaken diagnosis of a relapse of scarlet fever accounts for the paucity of Koplik's spots which were fading when first seen. They would probably have been found to be more numerous had the suspicion of measles prompted examination of the buccal mucosa at an earlier date.

The cause of the abortive nature of the disease is to be found partly in the character of the epidemic and partly in the incomplete immunity acquired by the previous attack. In three out of seven other cases infected simultaneously the measles eruption never reached the distal extremities of the limbs. With one exception all made a rapid and uncomplicated recovery. The partial protection afforded by a previous attack of measles is well illustrated by H. Balme[14] who quotes 13 cases, all but one of which had a very mild second attack. Two of these were instances of morbilli sine morbillis, the diagnosis being established on the characteristic symptoms, the presence of Koplik's spots, and the spread of infection to other members of the family in each case. The interval of 39 days between the disappearance of the eruption of scarlet fever and the onset of the symptoms of measles is probably too long for the former exanthem to have in any way contributed to the attenuation of the subsequent disease.

I am indebted to Dr. J. E. Beggs, medical superintendent of the Grove Hospital, for permission to publish this case.

Tooting.

1 ical Observations, Sydenham Society, 1848.

2 Maladies des Enfants, second edition, 1854.
3 Diseases of Skin, New Sydenham Society, 1866.
4 Diseases of Skin, 1863.
5 French translation by Besnier and Doyon, 1881.
6 Principles and Practice of Medicine, fourth edition, 1901.
7 Allbutt's Medicine, vol. ii., 1897.
8 Allchin's Medicine, vol. i., 1900.
9 Bateman's Practical Synopsis of Cutaneous Diseases, 1813.
10 Clinical Lectures, 1848.
11 Principles and Practice of Physic, 1848.
12 Fagge and Pye-Smith: Text-book of Medicine, 1901. Comby: Maladies de l'Enfance, 1902, vol. i. Grancher in Brouardel, Gilbert, and Girode's Traité de Médecine, vol. i.
13 Adkins: On the Prodromal Rashes of Measles, Metropolitan Asylums Board Reports, 1899.
14 Practitioner, October, 1904.

DONATIONS AND BEQUESTS.—Under the will of the late Mrs. Holme-Simpson, of Town View, Kendal, and Romanway, Penrith, the Kendal Hospital, as residuary legatee, will receive £10,000.—By the will of Miss Scarrow of Sunderland £500 are bequeathed to the Sunderland Royal Infirmary.—Mrs. Emma Catherine Short of Fakenham, Norfolk, has by her will given £500 to the Victoria Hospital for Children for a "McKellar Cot," and £300 to the Kelling Open-air Sanatorium at Holt, Norfolk.—By the will of Mrs. Britannia Brigstocke of Wolverhampton £100 have been bequeathed to the Wolverhampton and Staffordshire Hospital.—Under the will of Captain William Olive Bird of Norfolk-terrace, Brighton, £200 have been bequeathed to the Westminster Hospital and £150 to the North-West London Hospital, Kentish Town-road, N.W.—Miss Mary Le Lievre of St. Peter Port, Guernsey, has by will bequeathed £200 to the Victoria Cottage Hospital, Guernsey.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv., Proœmium.

LONDON TEMPERANCE HOSPITAL.

A CASE OF SUCCESSFUL EXTRACTION OF COINS FROM THE ŒSOPHAGUS 23 DAYS AFTER HAVING BEEN SWALLOWED.

(Under the care of Sir WILLIAM J. COLLINS.)

A BOY, aged four and a half years, was admitted into the London Temperance Hospital on Sept. 20th, 1902, with the statement that 18 days previously whilst playing with other boys he had accidentally swallowed "a penny." Since that date his father said that the child had been unable to swallow solids and his diet had been restricted to fluids. Any attempt to swallow a solid morsel was followed by pain. On examination he was found to be a healthy, well-developed child. He did not complain of pain but said he "felt the penny inside" and pointed to the neighbourhood of the xiphoid cartilage as localising the position of the coin. Cross-examination failed to shake his assertion that he had swallowed "a penny." He swallowed fluids without much difficulty but could not be persuaded to try solids. A skiagram was taken and showed distinctly a circular shadow of rather less diameter than a penny piece at the level of the junction of the third and fourth dorsal vertebræ, in the middle line. He, however, adhered to it that it was "a penny" he swallowed. There had been no vomiting and no evidence of ulceration or suppuration although three weeks had elapsed since the swallowing of the coin. The fæces since admission had shown nothing abnormal. No abnormal signs were observed on physical examination of the chest or abdomen.

On Sept. 25th, under chloroform, Sir William Collins passed a coin catcher cautiously down the œsophagus and at its first withdrawal brought up two halfpennies held tightly together by capillarity, slightly streaked with blood and as black as ink. The allegations of the youngster as to the "amount" he had swallowed were thus corroborated and the skiagraphic appearance accounted for. No untoward symptom followed and two days later the child was discharged swallowing naturally and without pain.

NOTTINGHAM CHILDREN'S HOSPITAL.

A CASE OF REMOVAL OF A FRUIT STONE WHICH HAD BEEN LODGED IN THE RIGHT BRONCHUS FOR FIVE DAYS.

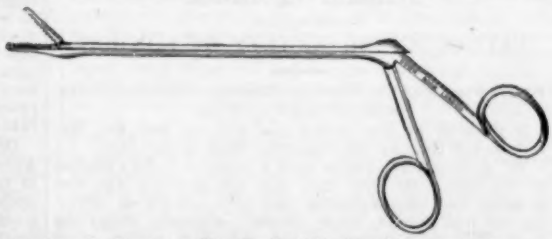
(Under the care of Mr. W. MORLEY WILLIS.)

FOR the notes of the case we are indebted to Mr. W. Henry Duncan, house surgeon.

The patient, a girl, aged seven years, was admitted into the Nottingham Children's Hospital on Oct. 11th, 1904. The history was as follows. On Oct. 7th at about 1 P.M. the child was sent on an errand and on the way she picked up a jam-stone in the street and placed it in her mouth. She choked with it, and a lady who saw her at the time endeavoured to get it away but said that she felt something go forward and it accidentally slipped into the windpipe. The urgent symptoms disappeared and the child was sent to school the same day but had to be taken home on account of fits of spasmodic coughing. Dr. J. M. Mackenzie of East Kirkby was sent for and he advised that the patient should be removed at once to hospital. This, however, was not done until the 11th.

On admission it was found that the breath sounds at the right base were more distant than those on the left. The percussion note was less resonant; vocal fremitus was unaltered. The temperature was 101° F., the pulse was 140, and the respirations were 60. General bronchitic sounds were also present. The patient was a good subject for laryngoscopic examination but nothing abnormal could be detected in the larynx except some redness. The voice was unaltered. During the day several attacks of dyspnœa occurred but never assumed an alarming character.

On Oct. 12th the breath sounds were markedly weaker over the right side of the chest and signs of pulmonary collapse at various places were found on auscultation. Mr. Willis operated on the same evening. The child was fully anæsthetised with chloroform. An incision was made exactly in the middle line of the neck from the cricoid cartilage and carried three inches downwards. The trachea was opened below the isthmus of the thyroid. During the operation the left innominate vein was not seen but with each inspiratory movement the anterior mediastinal structures covered by the fascia bulged into the lower part of the wound. A probe was passed into the trachea and the body was detected in the right bronchus. It was removed at once with crocodile forceps. Much muco-purulent material was coughed up through the wound, feathers being employed to get it away from the trachea. The opening in the trachea was not sutured but the wound was stitched up, a small tube being passed down to the tracheal wound. On the 13th the condition of the lung was as before. The tube was taken out and a gauze plug was inserted in its place. The temperature was 102°, the pulse was 136, and the respirations were 48. On the 14th the child was much more comfortable. The pulse and respiration were diminished. The dressing was changed. Subsequent progress proved uneventful and the patient left the hospital a week later.



Remarks by Mr. WILLIS.—The only comments I have to make on this case are: (1) the evidence of the history and the physical signs made the presence of the foreign body in the bronchus reasonably certain; (2) the ease with which the large bronchi can be explored after a very low tracheotomy has been performed; (3) the value of the forceps used for the extraction of the stone, which forceps were originally devised for the extraction of gall-stones (Fig. 3376 of Messrs. Down Bros.' catalogue); (4) the extent to which the structures of the anterior mediastinum bulged into the neck with the movements of respiration; and (5) the necessity for, and fortunately the possibility of, using the utmost deliberation in the operation especially up to that time when the trachea is opened.

ROCHDALE INFIRMARY.

A CASE OF MALIGNANT PUSTULE OF THE FOREARM TREATED BY EXCISION; RECOVERY.

(Under the care of Dr. W. J. KERR.)

FOR the notes of the case we are indebted to Dr. T. I. Wallace, resident medical officer.

The patient, a man, aged 62 years, was admitted into the Rochdale Infirmary on Nov. 4th, 1904, giving the following history. On Nov. 1st he first noticed a small red papule half way up his right forearm which caused him no inconvenience beyond a little itching. In the next few days, however, the arm became very much swollen and compelled him to seek advice. On admission a pustule having the following appearance was present on the right forearm. The centre of the pustule was about half an inch in diameter and consisted of a black and very dry slough. Immediately outside this was a complete ring of about four or five vesicles filled with clear fluid, while outside these again there was a red ring of intense congestion gradually fading into the normal skin beyond. The whole forearm was much swollen and extending up from the pustule half way to the axilla was a red line of lymphangitis. The axillary glands were enlarged and tender to pressure. The temperature was normal and the

pulse was 80 per minute. There was no pain. A cover-glass preparation was made of a scraping from the black necrotic tissue in the centre of the pustule and stained with methylene blue. The anthrax bacilli were easily recognised. The diagnosis having been thus confirmed the pustule was freely excised and the wound was swabbed with a strong solution of chloride of zinc. The swelling of the arm and the lymphangitis disappeared in the course of two or three days and the patient was allowed to go home on Nov. 13th, the edges of the wound having been previously drawn together with silk sutures.

Remarks by Dr. WALLACE.—As regards the origin of the case, the man was employed by a firm of flannel manufacturers and about two months before admission he had the work of cutting the hair off a number of cattle tails. These tails came, he thinks, from Hull. On the day before admission he was lifting down a wire rack on which the hair had been placed and cut the skin of his right hand. His coat was on at the time and he is sure that he did not injure his forearm. It is possible that the bacilli gained entrance through the wound of the hand and travelling up the lymphatics were arrested in the forearm, growth taking place there.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Paget's Disease of the Gum.—Obliterating Arteritis.—Intra-intestinal Cystic Swelling.

A MEETING of this society was held on Dec. 6th, Mr. RICKMAN J. GODLEE, the President, being in the chair.

Mr. A. HOPEWELL-SMITH read a paper on Paget's Disease of the Gum. He said that this was probably the first occasion that such a disease had been noticed as affecting the oral tissues, Paget himself originally describing it in 1874 as a disease of the mammary areolæ, while Butlin, Wickham, and others had added to their knowledge of the subject. That the genitalia might suffer sometimes had been conclusively shown by Pick, Rolleston, Fordyce, and Colcott Fox, whilst MacLeod had recently reported one instance of Paget's disease of the umbilicus. In the present case the condition affected the periphery of a new growth of the jaw—a so-called "epulis"—in a patient aged 25 years. There was a history of three years' duration but no record of any obvious source of irritation or predisposing or exciting cause. The neoplasm had the appearance of a periosteal fibroma with patches of blood-red kerato-hyaline material on its smooth free surface. Sections were cut and stained with hæmatoxylin and eosine, polychrome methylene blue, and also by van Giesson's method. Microscopically there was a tendency towards desquamation of the stratum corneum and its surface was covered with kerato-hyaline masses. The cells were ballooned and many were filled with the same granular or homogeneous matrix producing in many places meniscus-like bodies, some of which measured from 3μ to 10μ. Nearer the rete mucosum many of the "spring" cells had lost their intercellular bridges and were no longer separated by inter-epithelial channels. Some of their nuclei were in a "resting" stage but the condition described by Hektoen and Riesman as hypochromatosis was present, as were also typical heterotype amphiasters, ring chromosomes and centrosomes, and other signs of asymmetric mitoses. There were some evidences of karyoclasis and even karyolysis. Darier's so-called "coccidia" and typical myeloid cells could be here and there easily discriminated. In addition, and equally important, were the cell nests pathognomonic of squamous carcinomata, some measuring as much as 25μ in length. The basement membrane was extremely irregular in outline and penetrated the cutis vera to the depth of 250μ. In several places there had been an eruption of epithelial cells through the membrane into the interpapillary spaces. Parts of the circumference of the growth were surrounded by epithelium which had become œdematous and showed signs similar to those of chronic eczema. The interpapillary processes were crowded with a small round-cell infiltration which was most marked in the neighbourhood of the cell nests and beneath the eczematous surface. The infiltration consisted, as usual, of Unna's plasma cells, some eosinophiles, a few polymorphonuclear leucocytes and lymphocytes, together with the "mast" cells of Ehrlich. In attempting to elucidate the histogenesis of this case Mr. Hopewell-Smith expressed his opinion that Cohnheim's embryonal theory fell to the ground, as did also the mechanical sequestration hypothesis of Ribbert as well as the anaplasic theory of Hansemann. There seemed to be some evidence, however, to support the views of Thiersch and Waldeyer and to corroborate the recent investigations of Farmer, Moore, and Walker. The belief of Colcott Fox and MacLeod, as expressed in a recent paper in the *British Journal of Dermatology*, was favoured by Mr. Hopewell-Smith. Mr. Hopewell-Smith, in conclusion, alluded to the great immunity of the cheek and oral mucous membrane from squamous carcinomata and emphasised the fact that all morbid tissues should be systematically examined microscopically, no matter whether for diagnostic, confirmatory, or other purposes, as new and unrecognised manifestations of disease might often be superimposed upon older, more apparent, and less malignant lesions and neoplasms.—Mr. S. G. SHATTOCK said he considered that the evidence on which Mr. Hopewell-Smith had described the case as one of Paget's disease was most unsatisfactory. The specimens of in-growing epithelium which had been shown were but a normal appearance dependent on the direction of the section. Mr. Hopewell-Smith had described but a small portion of a large tumour and from the description given it was impossible to form any opinion as to the nature of the growth. Mr. Shattock asked on what character of the growth the diagnosis of Paget's disease was based.—Mr. HOPEWELL-SMITH, in reply, said that although he had been unable to demonstrate the presence of "coccidia" yet he thought that the appearance of the growth and the infiltration of the interpapillary processes with small round cells justified him in the view that the case was one of Paget's disease.

Dr. W. P. S. BRANSON in a communication on Obliterating Arteritis drew attention to the existing confusion in the use of the term. It was introduced by Friedländer in 1876 to describe obliteration of terminal arterioles in inflammatory areas, but was perverted by von Winiwarter in 1879 to the description of a lesion of main arteries to the extremities leading to gangrene. For 20 years subsequently arteritis obliterans was thus taken to mean an apparently causeless obliteration of main arteries, whether by aid of thrombosis or not. In 1896 Thoma denied that this disease had any specific identity and the literature of it practically came to an end at about this date. The definitions of arteritis obliterans offered by current text-books of pathology differed widely. Some said that a pure endarteritis was a syphilitic lesion; some that no distinction could be drawn by the microscope between syphilitic endarteritis and non-syphilitic fibrous hyperplasia; and others that an arteritis that obliterated, for whatever reason, was arteritis obliterans. There was no doubt that intimal proliferation played a prominent part in most chronic arterial lesions; it was marked in atheroma and marked in the generalised arteritis of syphilis. There seemed to be no abiding distinction except the tendency to fatty degeneration that marked atheroma. This tendency was absent in many cases of syphilitic arterial disease, but whether such an arteritis—viz., a lesion limited to the intima, widely distributed about the arterial system, but not liable to fatty metamorphosis—was a lesion peculiar to syphilis was a vexed question and he proceeded to cite a case in point. A boy, aged 12 years, under the care of Mr. H. Betham Robinson, to whom he was indebted for permission to publish the case, died after a few weeks' illness. He had come for treatment of an overgrowth of the gums but was found to have the symptoms of granular kidney and died from uræmia. His kidneys were not granular but much distorted by deep furrows, the left was about twice the size of the right, and the lower half of the latter was a mere knob of fibrous tissue. The heart was greatly hypertrophied and there was a widespread arterial lesion affecting the aorta, the cerebral, basilar, radial, and dorsalis pedis arteries, and in particular some of the terminal arterioles of the kidneys and spleen. The lesion was apparently a pure endarteritis and there was no indication of fatty changes. Microscopical examination left little doubt that the atrophy of the kidneys was anæmic in origin and depended upon arterial obliteration. In the regions of sclerosis there was some interstitial inflammation but the bulk of the remaining renal tissue in both kidneys was normal in all elements and the arteries were patent and healthy. Beyond the possible significance of two miscarriages which

had befallen the patient's mother there was nothing gained either by hearsay or by examination to suggest a family taint of syphilis. Similar instances were to be found reported among the scanty records of granular kidney in childhood, the marked features of the case under discussion being very suggestively reproduced—viz., an extreme disparity in the size of the kidneys, gross distortion of their outlines, and an absence of granularity. A few cases, circumstantially parallel, were cited from medical literature, but in none of them did the possible influence of syphilis appear to have been investigated. He thought it fair to say that the case which he had described was something apart from granular kidney and that it represented a disease deserving more than any other the name of obliterating arteritis. Though the arterial lesion in most respects resembled that associated with syphilis it could not be said that there was any evidence of a syphilitic origin in that particular case. If it were generally agreed that the condition he had described had a specific identity no doubt the question whether or not it was attributable to syphilis would soon be settled by inquiry into the diathetic history of such cases as they occurred.—Dr. H. D. ROLLESTON said that the case recorded resembled a case described by Dr. F. H. Hawkins some years ago before the society. That case showed the same widespread arterial change all over the body and was probably syphilitic in origin. The changes in the kidney were probably secondary to the changes in the vessels. With regard to granular kidney in children, he thought that those which were not due to scarlet fever were to be regarded as a para-syphilitic lesion and comparable to the cirrhosis of the liver which occurred in young children from a similar cause.—Dr. F. PARKES WEBER said that one form of arterial sclerosis had escaped the observation of Dr. Branson. The condition referred to occurred in young individuals, generally Polish Jews, in whom a gradual obliteration of the vessels occurred which gave rise to gangrene, for which it was necessary to amputate the limb. He regarded this disease as *sui generis*. The occlusion of the vessels was partly due to obliterative arteritis and partly to thrombosis. The symptoms of obstruction to the circulation manifested themselves suddenly. Syphilis was not a cause of this condition but it was noteworthy that many of the patients had been heavy cigarette smokers.—Dr. G. F. STILL suggested that an altogether different view might be taken of the nature of the case recorded. He pointed out that congenital hydronephrosis might be limited to one kidney. In the case under consideration there were dilatation of the pelvis and atrophy of the kidney on one side with granular change in the kidney of the opposite side. If this view was adopted the hypertrophy of the heart would be secondary to the change in the kidney. The hypertrophy of the gums was commonly associated with other congenital deformities and often with mental defect. He asked whether any examination had been made of the fundus of the eyes, for it had been pointed out that in cases due to syphilitic disease changes in the fundus were commonly present.—Dr. BRANSON, in reply, said that he was inclined to regard the case as due to syphilis although in the present case there was no evidence either direct or indirect pointing to such an infection. The eyes had not been examined and there was no evidence of mental deficiency in the boy.

Dr. R. S. TREVOR showed a specimen of an Intra-intestinal Cystic Swelling in connexion with the Ampulla of Vater. The cyst was found at the necropsy on the body of a young man, aged 24 years, who died from the effects of a perforated duodenal ulcer. The cyst contained three ounces of bile and arose from a base measuring 1§ inches long by ⅛ths of an inch wide. The bile-duct ran down upon the outer surface of the cyst and opened upon it by a crescentic opening. A probe passed into the duct of Wirsung came out at this opening, thus showing that the opening was the biliary orifice into the duodenum. Pressure upon the gall-bladder caused an escape of bile from the crescentic opening and pressure upon the cyst caused the same result, thus showing that the cyst and bile-duct or ampulla of Vater were connected. On section of the cyst a small opening could be seen in its upper part communicating with the ampulla of Vater. The cyst was lined inside and out with intestinal mucous membrane bearing villi. The origin of the cyst was thought to be due to the fusion in the middle line of two folds of intestinal mucous membrane which are sometimes normally present on either side of the biliary papilla, inclosing between them beneath the papilla a fossa or cleft. This explanation would account for the inner lining of the cyst with intestinal mucous membrane bearing villi, the presence of which in the lining membrane of the ampulla has not been described. No symptoms were attributable to the presence of the cyst.

LIVERPOOL MEDICAL INSTITUTION.

Conical Cornea.—Plantar Reflexes.—Dumb-bell Calculus.—Gastric Ulcer.

A MEETING of this society was held on Dec. 1st, Dr. JAMES BARR, the President, being in the chair.

Dr. K. A. GROSSMANN showed a patient with Conical Cornea and demonstrated the skiascopic appearances, which were particularly striking in this case owing to the high degree of the deformity, its centrally situated apex, its complete transparency, and the easy comparison with the other unaffected eye.

Dr. W. B. WARRINGTON read a note on the Plantar Reflexes. He described the plantar reflex of the normal flexor type and the pathological extensor response. He emphasised the importance in the method adopted for obtaining it and considered that only to the slow deliberate extension could a certain pathological significance be attached, though other types of extension might be very significant. The reflex obtained in various diseases of the nervous system was described and it was maintained that the character of the reflex was a valuable aid in distinguishing between functional and organic disease and equally so in differentiating between the different kinds of organic nervous disease.—Dr. T. R. GLYNN, Dr. R. J. M. BUCHANAN, and Dr. J. HILL ABRAM took part in the discussion.

Dr. W. ALEXANDER exhibited a Dumb-bell Calculus which he had removed from a man, 43 years of age. The calculus had existed for some years and a rigorous administration of solvents had no influence upon it. Suprapubic lithotomy was performed, a stone was removed, and the wound was closed. It was then found that another stone remained behind the prostate. This was removed by median lithotomy. The two stones thus removed formed a dumb-bell calculus. The bladder was divided into two cavities with a constriction between. It was found impossible to distend the bladder with lotion preparatory to the suprapubic lithotomy, as when the small sac was filled contractions occurred and the urine was expelled with force alongside the catheter. Dr. Alexander said that the case was unique in his experience, but Mr. Poland, in Guy's Hospital Reports for 1857, described a nearly similar case and discussed the mode of formation of such calculi.—Mr. RUSHTON PARKER said that the first perineal section performed by him, now many years ago, on a boy about 11 years of age gave a dumb-bell calculus, one portion of which lay in a sac by the prostate and the other in the bladder.

Dr. C. J. MACALISTER read a paper on Some Thoughts and Suggestions concerning Gastric Ulcer. He pointed out the fact that the characters of the ulcers were peculiar, both as to their shape, the course which they ran, and their surroundings, and commented upon the unsatisfactory explanations which had been given heretofore concerning the cause of the disease. By a series of lantern slides he demonstrated the characters of the simple gastric ulcer in its uncomplicated condition as distinguished from the same ulcer when secondary inflammations had taken place, and he also gave illustrations of other types of ulceration and pointed out that these did not tend to be converted into the so-called simple perforating ulcer. In seeking for a cause of the condition it was obvious that the disease mainly attacked women, and from a study of the sequence of events connected with the development of the thyroid, the association of amenorrhœa, and of concomitant indications of vaso-motor spasm followed by the chlorosis and stomach disorder, he suggested that the disease was another instance of vaso-motor spasm followed by necrosis dependent upon a toxæmia. He thought this the more probable since the administration of thyroid extract frequently relieved the amenorrhœa and that following this there was sometimes great general improvement in the health of the patients. Dr. Macalister was emphatic concerning the necessity for taking the cases in hand during the early stages and said that whatever might be done in the way of thyroid treatment later in the disease it was necessary to use all the usual precautions as regards rest, diet,

and palliative treatment in addition.—The PRESIDENT, Dr. E. T. DAVIES, Mr. E. M. STOCKDALE, Dr. W. CARTER, Dr. T. R. GLYNN, Dr. T. R. BRADSHAW, Dr. HILL ABRAM, Dr. E. E. GLYNN, and Dr. R. J. LOGAN took part in the discussion.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF OBSTETRICS.

Elephantiasis.—Cancer of both Ovaries.—Fibro-myomata.

A MEETING of this section was held on Nov. 18th, Professor A. J. SMITH, the President, being in the chair.

Mr. A. J. HORNE showed a case of Elephantiasis of the Leg and Vulva.

Dr. W. J. SMYLY showed a specimen of Cancer of both Ovaries. The patient, who was 66 years of age, ceased to menstruate at 54. In April last there was a slight red discharge which ceased but came on again in three months. Scrapings from curetting were benign. A small tumour could be felt on each side of the uterus. In November a large ovarian cystoma had formed. The uterus and both ovaries were removed by Doyen's method.

Mr. HORNE opened a discussion on the Influence of Fibro-myomata on Pregnancy and Parturition.

Dr. SMYLY said that the general impression was that women with fibroids were less likely to conceive than others, but these women were generally sterile long before. The cause of sterility appeared to be the condition of the mucous membrane. Another point was that these women went on bearing children to a later period in life than others, and it was attributed to ovulation and menstruation going on to a later period. His own experience did not either support or contradict these opinions. He thought that these tumours did not often cause obstruction during labour, even when growing low down in the pelvis, as they were usually drawn up out of the way. The chief danger of myomata was during the puerperium. Portions of the membranes were sometimes retained in these cases and by decomposition caused sepsis. Retained placenta was also common. He did not agree with Mr. J. Bland-Sutton that all myomata should be removed, though the risk of operation was not great.

Dr. R. D. PUREFOY said that the influence of fibroids in causing sterility was over-rated. An interesting aspect of the question was the greatly increased difficulty in diagnosing pregnancy in the first three months. A fibroid in the uterine wall enfeebled the uterine contractions and they often caused marked interference with the course of labour. He related a case of a primipara, 30 years of age, with a fibroid in the lower uterine segment. She went five weeks beyond full term. The presenting part could not be reached and there was a complete absence of labour. The uterus was removed along with the child and the patient made a good recovery. He thought that myomectomy was only advisable in the early months of pregnancy. The occurrence of pregnancy rather hastened the development and increased the size of these tumours.

Mr. E. H. TWEEDY related a case in which he had removed the uterus at the fifth month as the patient could not have gone to full term. As to fibroids causing sterility, he said it was not the fibroids but the endometritis that caused it in a certain number of cases. If there was a subperitoneal myoma it would not cause endometritis and there would be no sterility.

Dr. F. W. KIDD agreed as to the difficulty of diagnosing pregnancy in the early months when associated with myomata. As to sterility, he thought the question was one of comparative and not absolute sterility. He related a case of a primpara, 44 years of age, with two large tumours at the fundus. They caused transverse presentation, and version was performed. The placenta had to be removed manually. The patient made a good recovery. He had examined her since and found that the tumours had entirely disappeared. When pregnancy was complicated by cancer the cancer usually increased rapidly owing to the hyperæmia. He thought that the same increase usually occurred in the case of other tumours in similar circumstances.

Dr. H. JELLETT said that another aspect of the question was the effect of myomata on the life of the fœtus during the last months of pregnancy. Quite recently he had had a case in which death of the fœtus in utero apparently resulted from a myoma of the fundus.

The PRESIDENT related two cases. The first patient had a large fibroid tumour of the size of an eight months pregnant uterus. There were no urgent symptoms, but there was no room for a pregnant uterus along with the tumour. He removed the tumour and the following year the patient was delivered of a full term child and had had four children since. The second case was one of a six months pregnancy complicated by a large fibroid tumour. There were great distress and dyspnœa and the tumour was removed along with the pregnant uterus. This was another example of the danger of a large fibroid tumour in pregnancy.

BRADFORD MEDICO-CHIRURGICAL SOCIETY.—A meeting of this society was held at the Royal Infirmary on Nov. 15th, Mr. C. F. M. Althorp, the President, being in the chair.—Dr. A. Bronner showed:—1. A case of Brain Abscess opened through the Tegmen Tympani. The remarkable feature of the case was that although at the time of operation there was no bulging of the dura mater and although the opening made was very small still there was a considerable hernia cerebri afterwards. 2. A case of Foreign Body in the Eye removed by the giant magnet.—Dr. A. C. F. Rabagliati showed a case of Tuberculous Synovitis of the Right Knee-joint in a boy, eight years of age, cured by monositeism continued for six months, and also read a paper on an Entirely New Suggestion as to the Part played by Food in the Human Economy.—The paper was discussed by Dr. H. Angus, Mr. P. E. Miall, Mr. W. H. Thompson, Dr. T. W. Hime, Mr. R. Mercer, and Dr. F. W. Eurich.—Dr. Rabagliati replied.—Dr. Eurich read notes on two cases to illustrate Some Points in the Diagnosis of Hysteria. 1. A case published as one of hysteria by Dr. Arthur J Hall in the *Quarterly Medical Journal*, August, 1900. After an injury received in boyhood which necessitated trephining, the patient suffered from periodic attacks of right-sided weakness with rigidity and occasional epileptiform seizures and clonic twitchings combined with stupor and mental impairment, which attacks were accompanied, and probably caused, by increased intraventricular pressure. Four days after admission the patient was trephined by Mr. Althorp, the ventricles being drained. Death occurred from cerebritis nine days later. The post-mortem examination showed chronic internal hydrocephalus with patches of disseminated cerebritis. Dr. Hall's diagnosis of hysteria was criticised. 2. A case of Ganser's Hysterical Stupor in a girl, aged 23 years. The patient had a hysterical fit on receipt of a telegram and a letter informing her of the death of a brother. Her memory was impaired especially for dates and figures but for names it was good. The reaction time was slowed. Periods of submaniacal excitement followed with a few visual hallucinations. The patient refused food. There was hemianæsthesia of the trunk and the right leg. It was discovered that the telegram and letter were sent by herself. Becoming too noisy and troublesome in hospital she was sent to her home in the south, *en route* for an asylum. The treatment, especially the question of hospital treatment and the drawbacks of asylum life for such cases, was discussed. (Since the paper was read Dr. Eurich has heard that the patient made a rapid recovery at her own home.) The paper was discussed by Dr. Rabagliati, Dr. Angus, Mr. Mercer, and Dr. Hime.—Dr. Eurich replied.—On Nov. 23rd the annual dinner of the society was held at the Midland Hotel, when Dr. J. Rose Bradford of University College, London, read a paper on Errors in Diagnosis before a very large and appreciative audience.

ROCHDALE AND DISTRICT MEDICAL SOCIETY.—A meeting of this society was held on Dec. 1st.—Dr. J. Melvin read notes of a case of Epidemic Cerebro-spinal Meningitis. The patient, a woman, aged 38 years, had been nursing a case of typhoid fever. The onset was sudden, with vomiting and a temperature of 102° F., which was the highest temperature recorded throughout the case. Various rashes developed. Patches of erythema occurred irregularly; there were bullous eruptions and at one time a few spots resembling those of typhoid fever. Examination of the blood was negative as regards typhoid fever. The patient rested on the left shoulder with the legs drawn up. There was slight retraction of the head. Other symptoms were delirium and hyperæsthesia to touch but not to light or sound. Recovery took place.—Mr. W. Stanwell and Mr. S. T. Lord expressed the opinion that the case was one of typhoid fever complicated by meningitis.—Mr. Lord read a paper on the Treatment of Neurasthenia and Allied Diseases. He advocated prophylaxis in children who

inherited a neurotic tendency. They should be brought up in the country with a minimum of flesh food and should be educated slowly. Treatment of neurasthenia should be directed (1) to lessen excitability and (2) to impart force to the nervous system. Over-drugging should be avoided. Every case should be examined thoroughly. In this way the patient's confidence was gained. Mr. Lord cited some typical cases—namely: (1) hysterical elbow in a boy, cured after administration of chloroform; (2) hysterical vomiting in a boy, cured by the threat of a thrashing; (3) hysterical vomiting in a woman, cured by making "passes"; and (4) pseudo-angina pectoris in a man, attacks of which could be brought on by suggestion.—Mr. R. Burdett Sellers, Dr. A. Wallace, Mr. Stanwell, and Mr. G. W. Malim took part in the discussion.

ROYAL MEDICAL SOCIETY, EDINBURGH.—A meeting of this society was held on Nov. 25th at which Dr. Robert Hutchison gave a lantern demonstration illustrating the Diseases of Children. He commenced by showing slides of the various diseases of nutrition, such as infantile scurvy and rickets, and then went on to show various malformations of the chest. Next, after exhibiting slides illustrating various congenital syphilitic conditions in children in which the unkempt state of the hair was pronounced, and also some slides illustrating various rheumatic conditions, he showed a very complete collection of slides of the several nervous diseases to which children are liable, and concluded with a series of slides including some beautiful examples of microcephaly and hydrocephaly, and such various conditions as sarcoma of the adrenal bodies and of the brain.—Mr. Alexander Miles moved, and Dr. W. Macrae Taylor seconded, a hearty vote of thanks to Dr. Hutchison.—In reply, Dr. Hutchison recalled the old days when he was a senior president of the society, and concluded by emphasising the importance of a knowledge of the diseases of children in general practice.—Dr. A. C. Geddes read notes of a case of Sarcoma.—Dr. L. H. I. Bell read notes of a case of Tuberculous Nephritis.

GLASGOW SOUTHERN MEDICAL SOCIETY.—At a meeting of this society held on Dec. 1st Dr. John Rowan read a paper on Some Old Books of Medicine and Surgery. Amongst others, he showed and read extracts from Culpepper's Last Legacy (1656); Van Helmont (1662), whose treatment of fever, "Put him down a well and keep him there till he testifieth he is cool enough," is sufficiently drastic; Frederic Dekkers (1695), and Du Verney (1737), Nature of the Organs of Hearing. Many of the illustrations were reproduced as lantern slides and greatly increased the interest of the paper. Dr. Rowan also showed Wesley's Book of Treatment and specially called attention to his advocacy of electricity in no fewer than 45 diseases. This seemed quite modern.

NEWPORT MEDICAL SOCIETY.—A meeting of this society was held in the Newport and County Hospital on Nov. 30th, Dr. T. Morrell Thomas, the President, being in the chair. Several interesting clinical cases were exhibited and discussed, and the President read an address on the Complications and Sequelæ of Influenza. The paper described in a systematic manner the affections of the pulmonary, circulatory, and nervous systems, and of the eye, ear, skin, and so on, which the speaker had himself seen following attacks of influenza.

Reviews and Notices of Books.

The Principles of Hygiene: a Practical Manual for Students, Physicians, and Health Officers. By D. H. BERGEY, M.D., Assistant Professor of Bacteriology, University of Pennsylvania. Illustrated. Second edition. London, Philadelphia, and New York: W. B. Saunders and Co. 1904. Pp. 536. Price 13*s.* net.

WITHIN conditions, the definition that "hygiene aims to make growth more perfect, life more vigorous, decay less rapid, death more remote," may be accepted. This at least sets before us a high and even ideal goal. At the outset in this work we are made conversant with one hygienic factor—viz., good print, good paper, and short lines. The strain on the visual mechanism of following a long line of print across a page is severe. It is not so in this work; moreover, the difference of type accentuates the salient features. *Per contra*, the division of words as regards their origin is sometimes neglected. It is not enough to establish a proposition to give the *obiter dicta* of the "late Professor J. G. Richardson" relative to persons of sanguine temperament. Such persons had better not read the Professor's forecast. The first chapter deals with "Air" on broad and useful lines. Are we to reconcile ourselves to "dioxid," "fibers," "liters," "disulphid," "hemoglobin," and "sulphid"? Well, letters are saved. The late Lord Justice Cockburn called attention to the saving of time in the pronunciation of a certain word by omitting one syllable. A non-diffident and witty barrister, later in the case, suggested that his lordship's pronunciation of the word "omnibus" might be cut down to "'bus" and thus save two syllables. Ventilation and heating are next tersely treated. Water-supply and sewage are fully dealt with, reference being made to the experience of continental and American communities. The chapters on Food, Diet, Exercise, Clothing, and Personal Hygiene are practical and to the point and are not overladen with detail. Industrial, school, military, and naval hygiene are discussed separately and the examples of the two latter subjects are taken, of course, largely from the observations made in America. Vital causes of disease, the nature of epidemics, and immunity are passed in review. Much stress is laid on the means to prevent yellow fever and malaria. In these days when the medical officer of health of the City of London is endeavouring to obtain better cleanliness in barbers' shops it is interesting to note that in greater New York rules for the governance of barbers have already been in operation and similar rules have been adopted in New Orleans and other cities. A very long chapter is devoted to the laws relating to quarantine in the United States.

The work is well written, full of facts, and not overcrowded with minutiæ, so that the great principles stand out in bold relief. Its perusal will help to broaden the reader's views of the national and international importance of hygiene in the truest sense of the word.

Beiträge zur Wissenschaftlichen Medicin und Chemie. (*Contributions to Scientific Medicine and Chemistry.*) "Festschrift" in Honour of the Sixtieth Birthday of ERNST SALKOWSKI. With one Portrait and two Plates. Berlin: Hirschwald. Pp. 480. Price 12*s.*

GERMANY is the land of "Festschrifts." When any distinguished teacher reaches a certain age it is usual for his pupils to print in his honour and to present him with such a galaxy of original papers as serve to make a goodly volume. From numerous pupils, friends, and colleagues we find 46 original papers written in honour of one who has done much to advance physiological and pathological chemistry. The papers are upon the most diverse subjects and their titles alone occupy three pages. Beginning with E. von Leyden we have a short paper on the crystals that bear his name jointly with that of Charcot. There are papers in English by E. P. Cathcart on Urotryptic Digestion, and on Bile Pigment by W. R. Orndorff and Teeple from America; and in German on Sugar Estimation and on Beri-beri by Kumagawa Suto and Yamagiwa of the University of Tokio. Naturally, most of the contributions are from German colleagues and deal with many chemico-physiological questions—e.g., the occurrence of heteroxanthin, indol, phenol, and glycuronic acid in urine, excretion of purin bases, estimation of indol in fæces by a colorimetric method, oxidation and decomposition in living matter (H. Friedenthal), origin of glucose from other sugars, chlorides in nephritis, action of cobra poison (M. Jacoby), excretion of aromatic bodies in cancer (C. Lewin), oxalic acid excretion and glycosuria (Luzzatto of Padua), metabolism of phosphorus, pyrol reaction, a new test for cholesterin (C.

Neuberg), occurrence of protagon-like body in the suprarenal capsule (Orgler), catalysis, metabolism during hunger in lizards, indiguria, ferments in the hen's egg, and the formation of succinic acid in Liebig's extract of meat. There are a few clinical and pathological papers dealing with pericarditis, cachexia of cancer, diabetes insipidus, euphorin as an expectorant, metabolism in obesity, combination of precipitin and albumin, and agglutinin receptors. These serve to show the variety of the subjects dealt with in this "Festschrift" in contributions by representatives of various nationalities in honour of one whom they justly regard with respect and hold in honour.

Lehrbuch der Physiologie. (*Manual of Physiology.*) By L. HERMANN. Thirteenth edition, with 245 figures. Berlin: Hirschwald. 1905. Pp. 763. Price 16*s.*

THE first edition of this work appeared 42 years ago when physiology under J. Müller, du Bois Reymond, Brücke, Helmholtz, and Ludwig first began to be an exact science. Most properly the author lays great stress upon the importance of a proper training in physics before the student attacks the problems of physiology. Of histology there is little, as in most German books on physiology. After an admirable and terse *résumé* on physics as applied to physiology there is an equally lucid review of the general chemical constitution of the body. Then commences the description of the motor organs of the body, preceded by a short historical account of the cell and its functions. We find fully set forth Professor Hermann's view as to the analogy, if not identity, of muscular contraction and rigor (p. 173). After the general physiology of muscle there is a special chapter on Movements of Joints and Special Muscular Acts, including the Production of Voice and Speech. Professor Hermann's own researches on the production of vowels and consonants are fully set forth. Indeed, this part is more fully dealt with than is usual in English text-books. The physiology of nerve is, of course, very fully discussed, and so are electro-motive phenomena, as was naturally to be expected on the part of one who has done so much by his own researches to shed light on these subjects and to banish the theories of one who was his master. The study of the central nervous system and the senses bulks largely (pp. 249–459). Unfortunately, some of the schemata are rather small and crowded to one side of a page. Larger ones would have been better.

The third section deals with nutrition and animal heat. The chapter on the Nature of the Heart Beat is full of facts and critical observations. The newer nomenclature of Engelmann is introduced. In connexion with the pulse we find less of sphygmometers than is usual in English text-books; three mentioned bear the names of von Basch, Riva-Rocci, and Mosso and are extensively used on the continent. No diagram is given to show the structure of the apparatus. Respiration, digestion, secretion, and temperature are successively discussed. With regard to lymph formation there is also less given than in some of our own text-books. The account of blood formation suffers from the want of sufficient illustrations. Animal heat is excellently done, as was to be expected from so distinguished a physicist as Professor Hermann. While to English readers the diagrams and woodcuts are not so good as in our own text-books, it would be difficult to pack into so many pages such an array of facts, doctrines, short summaries, historical sketches, and sharp criticisms as has been done in this volume. Perhaps the very concentrated pabulum makes it rather difficult reading—or at least difficult of absorption. It is a compact and extensive storehouse which may be consulted with the certainty of finding a reference to even the most occult matters in physiology. We wish the veteran Professor Hermann many days of activity and welcome this the latest product of his untiring energy and marvellous skill in collecting, collating, and marshalling facts and doctrines.

Aids to the Study of Sanitary Law. By HARRY CRITCHLEY, M.A., D.P.H., &c. Students' Aid Series. London: Baillière, Tindall, and Cox. 1904. Pp. 81. Price, cloth, 2*s.* 6*d.*; paper, 2*s.*

THE recognised legal text-books upon the law relating to the public health are bulky volumes, necessarily containing all the Acts of Parliament referring to all branches of the subject and the cases decided under their various sections. The possession of such books for the purpose of reference is indispensable to those charged with carrying out the law, because in the administration of justice in quasi-criminal matters technical accuracy is rightly enforced, but in order that a student may obtain a general idea of the powers of a sanitary authority he will hardly be required to master the books of Mr. Glen or Mr. Lumley, and they are not works which can usefully be glanced through in order to obtain a general idea of their subject matter. It is for the benefit of the student reading for his examination rather than for that of the medical officer of health seeking to inform himself as to his powers with reference to a concrete case arising in the exercise of his duties that Mr. Critchley has compiled a little volume containing a good deal of information in a small compass and in a readable form. It might have a wider sphere of usefulness before it and be of service to medical officers of health and to others in the employment of sanitary authorities if it were on a slightly larger scale and contained references to all the sections from which abstracts are made or which, more frequently, are paraphrased in it. It might then be carried in the pocket as a means to refresh its owner's memory and students also might find it more convenient if they could turn from it to study the full wording of a particular section without having to hunt for it first. The author gives as his reason for not quoting the Acts relating to vaccination that the law upon this subject is in "an uncertain condition." This hardly seems a good reason for not setting out the provisions of Acts which are quite as definite as many others and pointing out where uncertainty may, in the author's opinion, exist. The original period of the most recent Act dealing with vaccination has expired but it is as likely that it will be renewed from year to year by the annual Expiring Laws Continuance Act as that the Government will carry through fresh legislation upon a thorny subject under the present political conditions.

LIBRARY TABLE.

Spemann's Historischer Medicinal-Kalender. Compiled by Professor PAGEL and Professor SCHWALBE. Stuttgart: Spemann. 1905. Price 2*s.*—We strongly recommend every medical man to obtain a copy of this calander even if he does not understand German. Almost every second page has an illustration of some picture, bronze, print, or medal on some subject dealing with medicine. The subjects are chosen from Teniers, Dürer, Jan van Eyck, Mierevelt, and Rembrandt, the subjects themselves being remarkably quaint. We have nothing like it in this country. The text for each day treats of discoveries or facts in relation to medicine, with pithy extracts from celebrated authors.

The Hygiene of Bird Keeping. By W. GEORGE CRESWELL, M.D. Durh., F.Z.S. Kingston-on-Thames: R. G. Clement. Price 1*s.* net.—This little book will be welcomed by all lovers of birds, whether ornithologists, aviculturists, or the owners of a single pet songster. The author deals with his subject in a thoroughly practical and scientific manner and the results of his experiments prove the fallacy of som

rule-of-thumb theories of the bird dealer. For instance, Dr. Creswell shows that under proper conditions canaries can be kept out of doors throughout the winter with decided advantage to their health and also to their breeding capabilities. In treating of the construction of aviaries the author, while not subordinating a practical purpose to designs which please the eyes, has nevertheless managed to make some able suggestions for building aviaries of artistic merit. The question of the feeding of birds is also dealt with and the experiments in hybridization are as interesting as they are useful. It is satisfactory to see that attention is called to the thoughtless practice of hanging birds in cages just above the level of the sashes of windows and to the mistaken kindness of hanging a cage in a corner of a sitting-room or a kitchen near the ceiling. In the one case the bird is subjected to draughts and will in all probability develop catarrh and bronchitis and in the other it lives in a vitiated atmosphere. The book is well illustrated.

Markets, Fairs, and Slaughter-houses, being a Collection of Special Provisions relating to Markets, Fairs, and Slaughter-houses contained in the Private Acts of Parliament and Provisional Orders obtained by English Provincial Corporations and Urban District Councils in the Years 1901, 1902, 1903. Compiled and arranged by FRANK NOEL KEEN, of the Middle Temple, Barrister-at-law. London: P. S. King and Son. 1904. Pp. xii.–78. Price 3*s.* 6*d.* net.—Mr. Keen has compiled a small but useful set of precedents for parliamentary draftsmen to whom is intrusted the task of drafting private Bills dealing with the subject-matter defined in the title given. It may also be found of service by members of local bodies seeking to obtain Acts of Parliament and provisional orders who may desire to make themselves acquainted with the powers already enjoyed under similar authority by other districts. Private Bill legislation in connexion with the regulation of slaughter-houses, the prohibition of private ones and the institution of public ones, and sections in corporation Acts giving full powers to market keepers and other officers to exclude or to remove tuberculous and otherwise diseased animals are all topics of importance to those interested in the public health, and accurate knowledge as to how such matters are dealt with elsewhere may be of use at any time to those who desire to see the community in which they live as well protected from disease as are its neighbours.

New Inventions.

MIDWIVES' BAG AND CONTENTS.

SINCE the passing of the Midwives Act (1902) I have been asked by several of the newly registered midwives what were the best appliances to carry under Rule E of the Midwives

Board. At my suggestion Messrs. Ferris and Co. of Bristol have put together a very useful bag and contents, which, I consider, cover all that is necessary. The bag is made of strong black leather, having a moveable lining for washing purposes. The contents are as follows: four bottles in wooden cases for (1) liquid extract of ergot, (2) aromatic spirit of ammonia, (3) permanganate of potassium crystals, and (4) boric lotion; minim measure; female catheter; enema syringe; clinical thermometer; scissors; nail brush and antiseptic soap in case; vaginal douche; antiseptic cotton wool; and soft soap with iodide of mercury and carbolised ointment. The cost of the bag is two guineas.

Upper Pontnewydd. ALFRED W. HAYLES.

A NEW UTERINE MOP.

THE difficulty and amount of time wasted in removing the wool from the ordinary Playfair's probes after it has been used led me to try to devise some means by which the mop might be more easily and quickly removed. It occurred to me that a cap of some absorbent material which would fit over a conical probe would serve the purpose and such a cap or mop I have had made; this slips over a conical or tapering metal probe and is held in position by a small bayonet catch which effectually prevents it from twisting round or leaving the probe. The dry mops weigh 13 grains (0·79 gramme);

after being used they weighed 39 grains (2·5 grammes); they are therefore sufficiently absorbent for the purpose. The advantages over the ordinary Playfair's probe are: (1) ease and rapidity of dressing the probe; (2) ease and rapidity of removing the mop after use; (3) both mops and probes are easily sterilised; and (4) the tapered part of the probe being made of plated copper can be bent to any desired shape. The caps are put up in sterilised packets of four or they may be had separately but not sterilised.

Both probe and caps were made for me by the Galen Manufacturing Company, Limited, Wilson-street, New Cross-road, London, S.E., and my thanks are due to them for so successfully carrying out my suggestions.

Stratford-place, W. S. JERVOIS AARONS.

OTOLOGICAL SOCIETY OF THE UNITED KINGDOM.—The annual dinner of this society was held at the Trocadéro Restaurant, London, on Dec. 5th, Dr. Thomas Barr being in the chair. Amongst those present were Sir R. Douglas Powell, Sir T. Barlow, Sir Felix Semon, Dr. F. Roberts, Mr. T. Mark Hovell, Dr. U. Pritchard, Dr. N. I. C. Tirard, Dr. J. Dundas Grant, Dr. Dawson Williams, Mr. C. A. Ballance, Dr. G. Taylor Guild, Dr. H. Tilley, Dr. H. Jones, Dr. W. Jobson Horne, and Mr. G. R. Sims. After the toast of "The King" had been duly honoured Sir Douglas Powell proposed "The Otological Society." He said that the important point was to make the work of the society as clinical and practical as possible. It was the labyrinthine character of the organ of hearing that rendered it essential that it should be the specialty of men who devoted their whole attention to the diagnosis and treatment of its affections. The chairman, in responding, said that the society had done good work for the last five years. He hoped to see the institution of organised and systematic research in connexion with the society. He believed that if anyone were prepared to enter into research work in regard to the ear the necessary money would be forthcoming. He suggested that a permanent museum for otology should be founded in London. Mr. Ballance proposed the toast of "The Guests" and strongly urged the full recognition by the great London hospitals of the claims of aural surgeons; it was only prejudice and ignorance that prevented this being done. He concluded by eulogising the work of the most prominent guests present and described Mr. Sims as the representative of the eternal struggle between right and wrong and congratulated him on possessing a spoon of sufficient length and strength to be able to sup with credit with the devil of official inertia. Dr. Tirard responded for the guests, as also did Mr. Sims who observed that the public did not yet appreciate, and were not likely to appreciate, the work of the society. Everyone sympathised with the blind man but laughed at a deaf man. When he was an actor he found that an audience could always be roused to mirth by a deaf man, whilst a blind man made them inclined to weep. To Dr. Pritchard was intrusted the toast of "The President of the Society," Dr. Barr, and after that gentleman had acknowledged the compliment he concluded by proposing the health of the two honorary secretaries, Dr. Tilley and Dr. Jones.

THE GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION.

MONDAY, NOV. 28TH.

THE Council met again to-day, Sir WILLIAM TURNER, the President, being in the chair.

Report on the Final Examinations of the University of Edinburgh.

The first business was the consideration of the report by the Examination Committee on the report by the visitor and inspector of examinations (Sir George Philipson and Mr. Thomas Bryant) on the final examinations in medicine, surgery, and midwifery of the University of Edinburgh. This report was formally received and entered on the minutes on Saturday.

Sir PATRICK HERON WATSON moved that the report and recommendation therein contained be adopted. He read the report as follows:—

The Examination Committee have experienced unusual difficulty in their consideration of this report by the visitor and inspector, partly because of the great elaboration of the examination arrangements at Edinburgh, and partly because the visitor and inspector do not always complete their remarks on one section of the examination at the part of the report in which that section is mainly described.

Your committee have endeavoured to simplify the arrangement of their report as far as possible, although this requires a good deal of reference backwards and forwards in the pages of the report of the visitor and inspector.

REPORT ON THE WRITTEN EXAMINATION IN MEDICINE, SURGERY, MEDICAL JURISPRUDENCE AND MIDWIFERY.

The visitor and inspector report that the questions were suitable and that the estimation of the answers was equitable.

ORAL EXAMINATIONS.

Medicine.—This examination the visitor and inspector state was excellent and "well adapted to elicit the knowledge and attainments of the candidates and the estimation of the value of the answers of the candidates was reviewed with great care and discrimination," and in it the visitor and inspector concurred.

Jurisprudence and Public Health.—The visitor and inspector saw two candidates examined. They describe the specimens and models placed on the table. No opinion is expressed by the visitor and inspector as to the standard of this examination. Both the candidates got marks under 50 per cent. In this the visitor and inspector concurred.

Surgery.—Pathological specimens, casts, photographs were freely used. No opinion is expressed as to the standard of this examination and no opinion is given regarding the estimation of the students' answers, whether these were over-marked or not.

Midwifery.—Pathological specimens, instruments and appliances, fœtal skulls, normal and abnormal pelves, a phantom and mannikin, and casts of heads of fœtal skulls were shown. The visitor and inspector state that the examination was excellent and that they concurred in the marks awarded.

CLINICAL EXAMINATIONS.

Medicine.—Each candidate had to write a full clinical report of one case and to write at least two prescriptions. The urine had to be examined. Two hours were allowed. For the written report 80 was the maximum and for the prescriptions 20 additional marks were given = 100. The visitor and inspector state: "The majority of these reports were highly creditable, systematically arranged, carefully written, and correct in spelling. In some the symptoms and physical signs were given very fully, in others in a more restricted manner. The diagnosis in general appeared to be correct." The prescriptions also were generally appropriate. Subsequently the candidates were examined orally in clinical medicine and for this examination 70 marks were given for the bedside examination of a case and 12 marks for skin cases, and 18 marks for urine and microscopic examination = 100 the maximum marks. Regarding this oral examination the visitor and inspector state that it was comprehensive in every particular, conducted with order and precision, and was calculated to elicit the practical knowledge and attainments of the candidates in manipulative medicine generally, with the interpretation of symptoms and physical signs. The manner and mode of interrogation and demeanour of the candidates to the patients were deserving of commendation. The marks allotted were, in the opinion of the visitor and inspector, a just estimate of the knowledge and answers of the candidates.

Clinical gynæcology.—The visitor and inspector report that this examination was carefully arranged, admirably conducted, and most valuable in estimating the practical knowledge of the candidates in diagnosis and treatment, instrumental and operative. The marking was, in the opinion of the visitor and inspector, a just estimate.

Clinical surgery.—As in medicine, this also began by the candidate reporting in writing a case at the bedside, for which an hour was allowed, and the maximum value of which report was 30 marks. The visitor and inspector state that generally the reports by the candidates were systematically arranged and written with care. In some the diagnosis was well reasoned out and differentiated, while the prognosis and treatment, operative and medicinal, were equally well reviewed and concisely stated. The marking was in accordance with the required standard. After this written case the candidate was examined orally and the oral examination was divided into three sections, A, B, and C.

The visitor and inspector state as to Part A "that each candidate was given a case which had been previously selected in the examination ward to examine and briefly report. For this he was allowed 15 to 20 minutes. Upon this case he was subsequently examined ten or more minutes and the case, when skilfully used as a text, brought out more or less of the candidate's knowledge." As this committee is unable to understand what the visitor and inspector intend to convey in this paragraph the committee leaves it to the Council.

Part B is stated by the visitor and inspector to comprise "the examination upon two previously assigned operations—in surgical anatomy and surgical procedure." These "operations," according to the visitor and inspector, consisted only in skin markings of lines of incisions. The candidate also was questioned in surgical anatomy and surgical procedure on the same patients. All this is stated to have been carried on in a ward to which the patients' friends and visitors, male and female, were freely admitted, and thus exposure of any part of the patient's body was inadequate or impossible. It is further stated that "no attempt was made practically to get out of any candidate any precise knowledge of the relation of an artery or nerve beyond what book knowledge would have given him." The visitor and inspector add: "The examination was so unsatisfactory that we [they] were enabled to realise the truth of the adverse criticisms we [they] have heard of this method of examination in a way which we [they] never before believed to have been possible." The faculty of the University do not dispute the presence of strangers in the wards but they affirm that screens were put round the beds of the patients during examination when that was necessary. This committee is of opinion that statements so strongly adverse by the visitor and inspector should have been supported by detailed instances of inefficiency of examination methods. The medical faculty of the University do not admit the accuracy of the statements of the visitor and inspector and from notes furnished by the examiners the faculty is satisfied that the examination in surgical anatomy was not only appropriate but also of a very searching and practical kind. Further, the faculty states that the present inspector, when reporting on the clinical surgical examination in Edinburgh University in 1894 with Sir George Duffey, said: "The entire examination in clinical surgery was a most complete, searching, and practical one." The Faculty states that "the examination is conducted on precisely the same lines," so far as method is concerned, and is improved in accordance with recommendations of the visitor and inspector made at that time.

Part C of the clinical oral examination was on surgical instruments and the visitor and inspector state that it was "fairly satisfactory." In addition to the written, oral, and clinical examination in surgery, there is also the practical examination in bandaging, the treatment of fractures and dislocations, and operative surgery. The visitor and inspector state that only one out of six candidates is required to do an operation, owing to want of material, and they further state that he is selected from the men who were above the average—"the good men were taken on the operations on the dead body." The visitor and inspector do not say in what manner this selection is made. As regards the value of the single operation the visitor and inspector express strong doubts. "The single operation required of a candidate was as satisfactory or as unsatisfactory as such operations upon the cadaver usually are, but at Edinburgh more operations were not possible for reasons well known (the want of material), but we feel assured that a good examiner with full knowledge of surgical anatomy could, in the time occupied by a student in getting through this operation with success or otherwise, spend that time, or even half of it, with much greater success as an examiner and advantage to the candidate, by testing upon a muscular but not fat living subject, lightly covered, and placed in a horizontal position, the candidate's knowledge of surgical anatomy, of his methods of examining sick people, of recognising or reducing dislocation and fractures and, not less, his knowledge of operations even by the employment of chalk lines, when such are put in with knowledge of the nature of deeper parts and with brains."

Concerning the five men who did not get an operation to do the visitor and inspector report: "We were present when much of this work was carried out and we were well satisfied that the examination was a good one. The candidates' answers to questions and the way they did their work were not satisfactory and out of a batch of five no one obtained a B mark. The variety of splints and mechanical appliances might have been enlarged with advantage and others than those commonly used at the infirmary or by the examining professor displayed."

After these remarks the visitor and inspector proceed to say: "We were much pleased with both the oral and practical surgical examinations." Your committee admits its inability to interpret for the Council the thoughts of the visitor and inspector on the practical examination in surgery. In the general summation of their work under the heading "Remarks" the visitor and inspector assert that the examination in surgery is a mere pass, that "the knowledge of clinical work and of the diagnosis of disease was in many of the candidates very deficient," that "in some instances the student's ignorance of pathological preparations and of pathological knowledge in its relation to treatment was very startling." They do not state whether such men were allowed to pass into the profession. They suggest that the methods of teaching require revision in Edinburgh and everywhere else.

The visitor and inspector then proceed to formulate their "conclusion." In the first sentence of this conclusion they state: "It is with pleasure that we now give it as our conclusion, after a close and prolonged inspection, that the final examinations for the M.B. and Ch.B. degrees of the University of Edinburgh, taken as a whole, are 'sufficient.'" In the second sentence they say: "Some of the arrangements and methods of the examination in clinical surgery ..... not only spoilt the work ..... but turned it into what must be described as a failure." This committee cannot reconcile these antagonistic deliverances.

RECOMMENDATION BY THE COMMITTEE.

As the difference of opinion between the visitor and inspector on the one hand and the University on the other is fundamental as to the nature of the surgical examination and as the visitor and inspector have not given any detailed evidence in support of their adverse criticisms and as some of the statements of opinion by the visitor and inspector are irreconcilable with each other this committee recommends that the Medical Council should direct that a further inspection

be made of the surgical part of the final examination in the University of Edinburgh.

Dr. MCVAIL seconded the motion.

The PRESIDENT said that it was obvious that sitting there as the representative of the University of Edinburgh he was bound to say something on this important document. There were usually three documents, the report of the visitor and inspector, the remarks made by the Faculty of Medicine of Edinburgh upon it, and the report by the Examination Committee. With reference to the report of the visitor and inspector, so much of that report was entirely satisfactory as to the mode in which the final examination was conducted that really he had no observation to make upon it except that he was pleased to find that what constituted three-fourths of the examination was very cordially commended. But there were parts of the report which might be regarded as strongly adverse criticisms and it was on these points that he specially wished to speak because he thought he might be able to clear up certain questions which the visitor and the inspector did not seem entirely to have apprehended. The points that he thought he ought to comment on were those which might be classed under the general head of surgical anatomy, procedure, operative surgery, and then certain general observations which were interspersed throughout the report because it was perfectly obvious in reading the report that that part of the examination which was regarded by the inspector and visitor as defective was the examination in clinical surgery and in practical surgery. He would begin with that part of the report which appertained to the surgical anatomy and procedure. In this part the inspector and visitor said:—

> During the three afternoons we devoted our attention to this part of the surgical clinical examination not a patient was placed in the position of one who had to undergo the operation suggested. No mention was made of assistants or the use of instruments which might be required. No attempt was made practically to get out of any candidate any precise knowledge of the relation of an artery or nerve beyond what book knowledge would have given him; indeed, the examination was so unsatisfactory that we were enabled to realise the truth of the advere criticisms we have heard of this method of examination in a way which we never before believed to have been possible.

He did not exaggerate when he said that that was a statement of a sweeping character and it was quite obvious that anyone bringing a charge of this kind against the examination of a body the position of which in the medical profession was so well recognised as the University of Edinburgh ought to have supported the charge by individual examples. He thought the General Medical Council had in this matter of visitation and inspection of examinations laid down a standing order which was of great importance in connexion with the mode in which reports were to be presented to the Council. On Saturday he thought he heard Sir George Philipson (the visitor in this case) say when the question of standing orders was referred to by Sir John Batty Tuke that he was not aware of any reference in his commission to standing orders. Perhaps the Council would allow him to read a copy of the commission which was given to Sir George Philipson. It was as follows:—

> On behalf of the General Council of Medical Education and Registration for the United Kingdom and in accordance with the Council's standing orders on the subject of visitation and inspection of examinations I hereby appoint you as a visitor.

And so on. It was the duty of an inspector and of a visitor to know what the standing orders said on this matter, for if they did not look into the standing orders he was sorry to have to say he did not think that they had fully discharged their duty. Now he would ask them to look at Standing Order No. 18 which read:—

> The inspectors and visitors shall enter in a diary the date of, and the time occupied in, each inspection or visitation, together with any observations they may respectively think fit, and they shall present to the Council at such times as may be required those diaries, together with reports as to the sufficiency or insufficiency of the materials for, and the modes and results of, the examinations which they inspect or visit.

He would ask Sir George Philipson whether he kept a diary?

Sir GEORGE PHILIPSON: I had no diary furnished by this Council.

The PRESIDENT: Did you keep a diary?

Sir GEORGE PHILIPSON: I have not got it here.

The PRESIDENT: The standing order says the diary is to be presented to the Council. Now I should like to see that diary.

Sir GEORGE PHILIPSON: I shall be very happy to furnish it but I have not got it here.

The PRESIDENT: The standing order says the diary shall be presented to the Council. Your commission distinctly states that the visitation is to be "in accordance with the standing orders on the subject of visitation and inspection."

Sir GEORGE PHILIPSON: A diary is in existence.

The PRESIDENT: I would like to call for it. Without it how am I to go on with this discussion?

Dr. PYE-SMITH: May I ask whether you are speaking as the delegate from Edinburgh or as the chairman of the Council?

The PRESIDENT: It is, I confess, difficult to separate the two capacities; still, speaking as the representative of the University of Edinburgh, I think I have a right to ask for this diary.

Sir HUGH BEEVOR: I should like to have the commission read again because I also was appointed and I failed to keep a diary.

The PRESIDENT: We will come to that when we take up your visitation.

Sir HUGH BEEVOR said that he did not read into the commission the meaning which the President had given.

The commission having been read again,

The PRESIDENT said that surely Sir Hugh Beevor took the trouble to look into the standing orders. But, to proceed, the fact remained that they had not got Sir George Philipson's diary before them.

Mr. BROWN: Have we got the diary of the inspector, Mr. Bryant?

The PRESIDENT: I have not seen it.

Mr. BROWN: Then we ought to obtain it.

The PRESIDENT, continuing, said that he was now going to question the truth of the paragraph which he had read. (Here he quoted extracts from a statement supplied to him by one of the examiners.) These extracts, in his opinion, showed that the paragraph did not correctly describe the nature of the examination. Now as regarded the question of surgical anatomy and procedure. In this connexion a statement was made which was of a very curious kind, namely:—

> Let Parts B and C of this clinical surgical examination be conducted entirely apart from the wards and sick people. Let the professor of clinical surgery, for whom we both have an admiration, utilise his own theatre for his examinations in operative and manipulative surgery and employ three or four or five muscular and well-made women as figures upon which he can, with or without chalk lines, practically bring out of his well-read and fully lectured students their practical knowledge of living anatomy as applied to surgery, and of all other kinds of manipulative and operative measures.

It seemed to him that this was really a somewhat novel recommendation because of what it signified—namely, that surgical anatomy and procedure should be divorced from the bedside. They in Edinburgh understood a clinical examination to mean an examination at the bedside—an examination of the patients in bed and in the conditions in which a patient would be examined. And yet the visitor and inspector suggested that this part of the examination should be conducted elsewhere. Now as to operative surgery. This was a subject as to which there was difference of opinion amongst examining bodies and he thought the difference of opinion was largely due to the facilities which the different schools had in procuring dead bodies. Where dead bodies could be obtained plentifully there operative surgery was carried out necessarily to a much greater extent than where dead bodies could not be extensively obtained. But notwithstanding that he gathered from the report that the inspector and visitor looked with contempt upon this method of testing the qualifications of candidates—namely, by operations upon the dead body—he was sure that that was not the opinion of the Council. Another part of the report seemed to put the University of Edinburgh into a position in which it ought not to be placed by anyone occupying the office of inspector or visitor. It was this paragraph:—

> From the papers handed to us as specimens of the written examinations in all the subjects, which we have attentively perused, it is quite clear that most candidates have been well read and well coached up by books and lectures for they describe disease graphically and in the diagnosis of disease divide and subdivide subjects in an endless way, but the knowledge implied by this paper work, to make it of value, requires to be vivified and this can be efficiently carried out only by its application at the bedside to injured and diseased mankind.

That was a reflection upon the practical training in the University which he could not allow to pass unnoticed. It was entirely unjustified by the facts. He did not know of any university where the medical students had more time and labour devoted to their practical teaching. As to the report and recommendation of the Examination Committee, he

welcomed the proposal that a further inspection should be made of the surgical part of the examination. The report struck at the honour of a great institution. Sitting at the table he saw seven graduates of the University of Edinburgh and he felt assured that these gentlemen along with himself would consider that nothing should appear on the minutes of the Council reflecting on the honour of that University.

Sir VICTOR HORSLEY said he hoped that the recommendation of a further inspection would be carried out. He took that attitude not only because there was a conflict of opinion on the question of fact which had to be cleared up but also because he noticed that the rejections in surgery at this examination were one-third higher than the rejections in medicine and it did seem to him that this possibly suggested that the method of teaching surgery in Edinburgh required some readjustment. He thought that the date 1905 should be inserted in the recommendation. When the present inspector was appointed for 1904 he (Sir Victor Horsley) protested against the appointment on the ground that the inspector had not been within the walls of a surgical school for 15 years and he made the suggestion for the insertion of 1905 in order to secure that another inspector should be appointed for this work.

Dr. PYE-SMITH moved that the recommendation be amended to read:—

> As the difference of opinion between the visitor and inspector on the one hand and the University on the other is fundamental as to the nature of the surgical examination, this committee recommends that the Medical Council should direct that a further inspection be made of the surgical part of the final examination in the University of Edinburgh.

He considered that it would be better to leave out what he might call the controversial preamble. At the same time he could not agree with the view that the report was a slur on the University. All licensing bodies were liable to the same fate. London and Oxford had in the past been subjected to it and good had resulted. For their own sake all such institutions should welcome criticism.

Sir JOHN MOORE, in seconding the amendment, said that when he was a visitor he kept a diary but he was afraid the Council could hardly interpret it. No such thing as calling for the visitor's diary was contemplated according to his reading of the standing order. He could assure the Council that there was in existence a diary relating to this inspection of the University of Edinburgh. The inspector had that diary in his possession and he was the person who should be asked for it.

The PRESIDENT: As a matter of fact, I have acted as a visitor. I kept a diary and my colleague kept a diary.

Sir JOHN MOORE said that it was only when the Council called for it that the diary was to be presented. There was a recommendation to the effect that Parts B and C of the clinical surgical examination should be conducted entirely apart from the wards and sick people. That had been objected to on the ground that this was a clinical examination in surgery, but it was the faculty of the University that had divided the clinical examination into three parts. They would find: Part A, examination of one or more cases at the bedside; B, examination upon two previously assigned operations—on surgical anatomy and surgical procedures; and C, instruments. The visitor and inspector were perfectly in their rights to advocate that those parts of the examination would be more satisfactorily conducted in a theatre provided for the purpose. He could not agree that the honour of the University of Edinburgh was liable to be tarnished by an unfavourable report on the examinations. The Royal College of Physicians of Ireland had submitted to criticisms and had done their best to meet the views expressed in those criticisms.

Dr. NORMAN MOORE supported Dr. Pye-Smith's motion. He thought that they ought to regard the remarks or decisions of the visitor and inspector whom they appointed themselves with the kind of respect with which they would regard the remarks and decisions of a judge. He confessed, however, that he found that inconsistency of one part with another to which the Examination Committee had referred and he thought the judgment called for revision. There was one flaw in the report which consisted of going into subjects which were not the subjects of examination. The state of education or mind of candidates who were rejected, and the reason why they ventured to come where they must be rejected, seemed to be points with which a visitor and inspector should not deal.

Sir CHRISTOPHER NIXON said that his remarks would be a defence of the visitor. The sense of responsibility in connexion with visitation led him to impress on the Council that they should deal very tenderly with a report submitted by their visitor. A man who was to discharge his duty honestly to the Council was not to be deterred because he had given an adverse opinion if it were an honest opinion. A great amount of exaggeration seemed to attach to the points of criticism. Was there not a risk of the profession at large saying that when a powerful corporation was attacked it would have a certain amount of defence, whereas smaller bodies would not have the same defence? There was nothing in the criticism which would warrant the distinguished principal of the University of Edinburgh saying that there was any attack on its honour. The position of the University was too stable and deep-rooted in the traditions of Scotland and the whole empire to be affected by a petty little comment on how the clinical side of an examination was conducted. He supported the amendment.

Mr. THOMSON expressed the opinion that according to the Act the inspector had to report on the sufficiency or insufficiency of the examination. When the inspectors had done their duty in this respect their duty was practically complete. The University could raise its standard to any extent it liked or lower it so long as it was sufficient. That was a matter for the University. Referring to the true reading of the standing orders he submitted that the bulk of the documents before them did not form part of the report but were part of the diary which should have been presented with the report. He differed from Dr. McVail on that point. The Privy Council was only concerned with the report which should deal only with the sufficiency or insufficiency of the examination. He would like that for the future more definite instructions should be given to the Council's visitors and inspectors.

Dr. MCVAIL saw no objection to accepting the amendment of Dr. Pye-Smith. He thought they might improve it by striking out everything except the recommendation that a further inspection should be made. The committee, he said, had had difficulty in considering this report and he understood how keenly the report had been felt by the University of Edinburgh because it had never had a similar report presented to it. It was true that at the end the visitor and inspector accepted with pleasure this examination which was such a ghastly failure, but was the Council to remain satisfied? No such report had ever been given in before and the whole thing had been done without any detailed instances. He would regret if the Council ever instructed its visitors and inspectors to report in that way.

Dr. MACALISTER at this point suggested that Sir Patrick Heron Watson, instead of moving the adoption of the report, should move only the adoption of the recommendation.

This proposal was accepted.

Sir GEORGE PHILIPSON said he wished to make a correction of the statement he made on Saturday. He was not aware that there was anything in the standing orders with reference to the preparation of the report, the arrangement of it, or the conduct of the visitation. He was sorry he was not aware of that when they undertook the visitation and inspection. With respect to his diary he was sorry that Sir William Turner from the chair should indicate any uncertainty as to it.

The PRESIDENT: I do not indicate that.

Sir GEORGE PHILIPSON said he accepted that. If it was the wish of the Council that it should be forwarded he would do so without delay. Since he had been a member of the Council he had never heard of a visitor being asked to produce his diary. If he had been asked he would have brought it. As the outcome of the discussions that had taken place he would say that it was desirable for the aid of the visitor and inspector that there should be more definite rules and regulations. After dealing with some of the criticisms of the report he said that every care had been taken by the visitor and inspector as to the truth and correctness of the statements which they placed on the report. Those statements were true. He wished to say nothing about the counter statements in the remarks of the body inspected and reiterated by the representative of the University. The visitor and inspector were actuated by only one motive—faithfully and honourably to carry out the trust that had been imposed upon them. In conclusion, he acknowledged the kindness, courtesy, and consideration they had received from Sir William Turner and the officials of the University. Although the criticisms had been adverse that in no way

diminished the remembrance of the pleasure of their visit to the ancient and renowned University of Edinburgh.

Dr. PYE-SMITH agreed to the amendment being put in this form:—

That the Council direct that a further inspection be made of the surgical part of the final examination in the University of Edinburgh during the year 1905.

Sir PATRICK HERON WATSON said that on behalf of the Examination Committee he would accept the amendment.

Mr. BROWN said they were a body who were spending money to improve medical education for the sake of the public and he objected to the discussion on an important report of this kind being burked or shelved. He was pleased to hear from Sir George Philipson that every word in the report could be justified. He was sorry it appeared to be the feeling that a re-inspection should take place because it was a slur of a serious character. He proposed that the inspector and visitor should be instructed to give their reasons for their conclusions.

Dr. LINDSAY STEVEN stated that in regard to examination in the presence of two examiners the Glasgow School of Medicine interpreted the rule in a different way from what was done in Edinburgh. In Glasgow every student must have both examiners paying attention to him at the same time. They did not have two examiners examining two students in the same room at the same time.

On a vote the PRESIDENT announced that Dr. Pye-Smith's proposal as accepted by Sir Patrick Heron Watson was agreed to, three members voting against it.

Mr. BROWN moved that the visitor and inspector be asked to give details as far as might be necessary to bear out their conclusions.

Mr. JACKSON seconded the motion.

The PRESIDENT said that was one of the great objections to this report in Edinburgh, that it did not give details, and perhaps if it had given details a good many of the remarks he had made would not have been made. The report gave general statements but not evidence to bear out those remarks.

Dr. MACALISTER said it was the duty of every visitor and inspector to give details. If this were given as a special instruction in the present case it might be considered necessary in other cases.

Mr. BROWN then withdrew his motion, saying that he would at a future date move that a committee be appointed to draw up rules and regulations on this subject.

The Examinations of the Apothecaries' Hall of Ireland.

On the motion of Sir PATRICK HERON WATSON, the report of the examinations of the Apothecaries' Hall of Ireland carried out by Mr. Alexis Thomson and Sir Henry G. Howse was received and entered on the minutes. These two gentlemen, as inspectors of the examination, considered it sufficient.

A motion expressing the concurrence of the Examination Committee with the inspectors' conclusion was adopted also on the motion of Sir PATRICK HERON WATSON.

The Final Examinations at the University of Glasgow.

Sir PATRICK HERON WATSON moved that the report on the final examinations in medicine, surgery, and midwifery of the University of Glasgow should be received and entered on the minutes. The visitor, Sir Hugh Beevor, and the inspector, Mr. Thomas Bryant, expressed their opinions of these examinations in the following passage:—

We have been much pleased with the final examinations of this University and report with confidence the examinations as "sufficient." We have reported all the examinations in medicine and midwifery to have been most satisfactory, whilst those of surgery (clinical, oral, and practical) had reached a standard that can hardly be beaten and it would be satisfactory if it could be equalled. In saying this we would draw the attention of the University authorities to some remarks that were made in a report upon a sister University, that of Edinburgh, and which we now include in this report, for they are as applicable to the other Universities of Scotland as to all teaching and examining bodies in the United Kingdom.

The remarks concerning the University of Edinburgh alluded to in this passage were published as one of the appendices of the report on the University of Glasgow.

Dr. MCVAIL seconded Sir Patrick Heron Watson's motion.

Dr. MCCALL ANDERSON said that he would like to move an amendment. He was surprised to find that "the remarks prepared with special reference to the University of Edinburgh by Sir Geo. Hare Philipson and Mr. Bryant" should be included as an appendix to the report on the University of Glasgow. The Council would observe in connexion with this that the name of the visitor to Glasgow, Sir Hugh Beevor, did not appear under these remarks. What he (Dr. McCall Anderson) could not understand was how a visitor to the University of Edinburgh had any personal knowledge as to the answers made by the candidates for examination in Glasgow. He did not think that these observations in the appendix fitly appeared in the place they did. Glasgow was in a totally different position from Edinburgh as regarded these remarks because in Edinburgh all these remarks formed an essential part of the report and were signed by both the visitor and the inspector. He would therefore move as an amendment:—

That the appendix in question should not be entered upon the minutes but only the report signed by the visitor and inspector.

Mr. BROWN seconded the amendment.

Sir GEORGE PHILIPSON disclaimed all responsibility for the fact that the remarks on the University of Edinburgh should have been appended to the report on the University of Glasgow.

Dr. MCVAIL pointed out that the report as regarded Glasgow was exactly in the same position as the report concerning Edinburgh in this respect. The Council was bound to accept it as it was received from the inspector and the visitor. A member of the Council might move that it disapproved of the appendix and it could signify its disapproval of it to the Privy Council.

Sir HUGH BEEVOR explained that owing to the delay of a proof he had signed the report before seeing the appendix.

Mr. BROWN suggested that the appendix and also the part of the report which alluded to it should be excluded from the minutes.

The PRESIDENT: We came to the conclusion on Saturday that we could not mutilate a report.

Mr. BROWN remarked that the appendix which was not signed by the visitor, Sir Hugh Beevor, was not a part of the report.

Dr. MCCALL ANDERSON said that the inclusion of the appendix was repudiated both by Sir Hugh Beevor and Sir George Philipson.

After further discussion,

The PRESIDENT gave his ruling that the appendix alluded to was part of the report and he could not accept Dr. McCall Anderson's amendment to exclude it.

It was then agreed that the report should be received and entered on the minutes.

Sir PATRICK HERON WATSON then moved that the Council should adopt the report of the Examination Committee expressing agreement with the conclusion of the visitor and inspector that they were pleased with the final examinations of the University of Glasgow.

Dr. MCVAIL seconded the motion which was agreed to.

The Final Examinations of the University of Aberdeen.

Sir PATRICK HERON WATSON moved that the report on the inspection of the final and qualifying examinations of the University of Aberdeen in medicine, surgery, and midwifery should be received and entered on the minutes.

Dr. MCVAIL seconded the motion which was agreed to.

Mr. Thomas Bryant, who conducted the inspection of the Aberdeen examinations, expressed his opinion of them in his report in the following terms:—

The final conclusion of the reporter of this examination is that it is a good one and in some points an excellent one. It is certainly "sufficient" in the sense of the Medical Acts. Where criticism has been called for means for improvement can surely be found, so that the standard for the whole examination may be brought up to the same level as that which already characterises the greater part.

On the motion of Sir PATRICK HERON WATSON the Council adopted a report of the Examination Committee in which it was stated that "the conclusion of the inspector regarding the final examination of the University of Aberdeen is that it is a good one and in some points excellent."

The Final Examinations of the University of St. Andrews.

Sir PATRICK HERON WATSON moved that the report on the inspection of the final examinations in medicine, surgery, and midwifery of the University of St. Andrews should be received and entered on the minutes.

Dr. MCVAIL seconded the motion.

In concluding their report Sir John W. Moore, the visitor, and Mr. Thomas Bryant, the inspector, made the following statement:—

We are ready to report that the final professional examinations of the University of St. Andrews are "sufficient." All the written examinations have been described as satisfactory; the clinical examinations in

medicine and surgery as satisfactory but too limited; the oral examinations in medicine and surgery as good and that in midwifery as most satisfactory. The examinations in special surgical branches were full and satisfactory and the one in mental diseases good and highly interesting. The examination in practical surgery was sufficient.

The motion was agreed to.

Sir PATRICK HERON WATSON then moved that the report of the Examination Committee on the inspection of the University of St. Andrews should be adopted by the Council. The report of the Committee stated that it was of opinion that the whole examination was satisfactory but it reviewed the examination at some length.

Dr. MCVAIL seconded the motion.

Dr. MACKAY said that this report on the inspection had been very disappointing to all those who were associated with the medical school of St. Andrews. He also thought that the report of the Examination Committee might have been improved in many respects. In the course of the report of the visitor and inspector it was stated that they were informed that all candidates were excluded from the wards of the Royal Infirmary, Dundee, for ten days previously to the examination but they were by no means sure that this method was effective. He was there to give an emphatic denial to that statement made by the visitor and the inspector. In no case was a man examined on a case in which he had been previously employed. There was another criticism to the effect that the examination in clinical medicine as leading to a qualifying degree appeared to the visitor and the inspector as somewhat limited. The medical faculty of the University considered this matter. It was also stated by the inspector and the visitor that in one of the oral examinations the teaching examiner was too prone to show his teaching capacity rather than his examining power. He wished to say that the teacher in this case was one of the ablest and best men in the University and a man of whom they were proud. He had full confidence in his work as examiner. He thought it right to allude to these matters. The medical faculty of St. Andrews had sought in vain to find out the general principles on which these inspections were conducted.

Sir JOHN MOORE said that he would reply to the criticisms of Dr. Mackay. At the examination which he inspected there were only six candidates and a certain allowance must be made for the inexperience of some of the examiners. As to the remark that the method of excluding candidates from the Royal Infirmary at Dundee for ten days previously to the examination was ineffective, he found that there was one case of pulmonary consumption which must have evidently been in the ward for weeks. It was a new examination and a little experience was probably what was wanted. He held that both he and Mr. Bryant were justified in their report.

The report of the Examination Committee was then adopted.

The Council adjourned until the following day.

TUESDAY, NOV. 29TH.

The Council resumed on Tuesday, Sir WILLIAM TURNER presiding.

An Explanation.

Sir HUGH BEEVOR, as a matter of explanation, said his signature appeared at the end of the report on the University of Glasgow and the previous day he had stated that the signature did not apply to the last paragraph. He had found that on the final proof his signature was put in as a matter of form in the office. That final proof was not sent to him. He thought it should be an instruction that no signatures should be appended without final proofs being sent.

Examinations of the University of Edinburgh.

Sir PATRICK HERON WATSON moved:—

That the Examination Committee be requested to reconsider their report on the final examination of the University of Edinburgh in conjunction with the results of the additional inspection of the surgical part thereof directed by the Council to be made in 1905 and to present a final report on the two inspections at the November session of the Council in 1905.

Dr. MCVAIL seconded the motion which was agreed to.

Final Examinations of the English Conjoint Board.

Sir PATRICK HERON WATSON moved the adoption of the report of the Examination Committee on the further reply by the Royal College of Surgeons of England to the inspector's report on the final examinations of the English Conjoint Board. The following were the terms of the report:—

The inspection of the third or final examination in medicine, surgery, and midwifery of the Conjoint Examining Board in England was held in January, 1903. The report of the visitor and inspector was forwarded to the body inspected and subsequently this report, together with the remarks by the body inspected, was referred to the Examination Committee. This committee's report was adopted by the Council on Nov. 30th, 1903. Some criticisms were made by the visitor and inspector in reference to examinations in operative surgery and in ophthalmic and aural surgery and also in reference to the scheme of marks in use at the examination. These criticisms were referred by the Colleges to the Court of Examiners to consider and report thereon to the Council of the College. This Council forwarded the remarks of the Court of Examiners to the Medical Council, and on May 30th, 1904, the Medical Council by resolution referred the reply of the Court of Examiners to the Examination Committee for further consideration and report. The Examination Committee observes with satisfaction that the Court of Examiners recommend such an alteration in the system of marking as practically to meet the objections of the visitor and inspector. The Examination Committee regret that the Court of Examiners considers that such an examination in ophthalmic surgery as this committee regarded as being essential is unnecessary and that the Court of Examiners find an examination in operative surgery on the cadaver impracticable owing to want of material, and further, that they do not approve of candidates being made to perform operations on the cadaver. The Court of Examiners are of opinion that a written report on a medical and surgical case is neither useful nor practicable. The Examination Committee see no reasons for altering their opinion as to the value of written reports in testing the knowledge of candidates.

Dr. MCVAIL seconded the motion.

Sir CHARLES BALL, referring to the examination in operative surgery, said the Court of Examiners did not consider it desirable that candidates should be examined in operative surgery on the cadaver. It was also pointed out that candidates were required to attend courses in operative surgery. But if students had to attend courses of operative surgery on the dead body it was improbable that they would pay very much attention to those unless they were examined in the subject on the dead body. Improvements in training in operative surgery were very great and students going into general practice might be brought face to face with any emergency. He maintained that they could not be taught in any other way in this country than by operations on the dead body and if this teaching were to be a reality there must be an examination in it. If the subjects could not be obtained in sufficient quantity the best way was to render the students liable to this form of examination as far as the supply would go.

The PRESIDENT, replying to Sir VICTOR HORSLEY, said it would be possible to propose a motion on this subject next session.

The motion was then adopted.

Applications for Exemption.

Consideration was resumed of the recommendation contained in the last paragraph of the report of the Public Health Committee—viz., "That the Council should refuse a certain application for exemption."

Sir JOHN BATTY TUKE, in supporting the motion, said he had always taken the greatest interest in public health inasmuch as he was the chairman of the Education Committee which first drew up the original rules and regulations. He objected to any relaxation of those regulations, the original object of the Council being that there should be a high standard of qualification. A most dangerous form of relaxation was the introduction of individual cases. It was always easy to do a good-natured act at the expense of a general principle and it was equally hard to maintain a principle for the public good.

Dr. BRUCE said the Public Health Committee had agreed to support Dr. Lindsay Steven's motion that the Council would offer no objection to the applicant's being admitted to examination for the Diploma in Public Health. The committee would also consider a motion by Sir JOHN TUKE which was on the paper but which would not be moved.

Dr. LINDSAY STEVEN then moved his amendment in an altered form, viz.:—

That should this applicant be admitted to examination by any of the qualifying bodies without having formally complied with Rule 3, the Council will raise no objection to the registration of his diploma when obtained.

Sir CHARLES BALL seconded the motion.

Dr. MACALISTER said he still held that it was dangerous to grant exemption in particular cases and he believed it was the business of the Council not to entertain such exemptions. It seemed desirable that it should be remitted to the Public Health Committee to draw up new rules dealing with such cases and to report during the next session.

Dr. Lindsay Steven's amendment was carried and became the finding of the Council.

Sir JOHN BATTY TUKE's notice of motion was remitted to the Public Health Committee for consideration and report, viz. :—

That the following note to Rule 3 of the rules for Diplomas in Public Health be replaced: "Any candidate who shall produce evidence that he has himself held an appointment as medical officer of health under conditions not requiring the possession of a special sanitary diploma shall be exempt from this regulation."

Pharmacopœia Report.

Dr. MACALISTER, in moving the approval of the report of the Pharmacopœia Committee, referred to the retirement of Dr. Payne who had had much to do with the cataloguing and care of the valuable library. The committee was glad that Dr. Moore had undertaken the charge which Dr. Payne had laid down. He alluded with satisfaction to the sales of the Pharmacopœia and directed the attention of the Council to the inclosures of the Privy Council relative to the subject of uniformity of pharmacopœial preparations. Germany, he said, had made some little reservation on the ground that the Imperial Government had no final control over the Pharmacopœia. That was a case for the Federal Council. In England he had signed the agreement subject to such minor modifications as the progress of medical science and pharmaceutical science might render necessary from time to time. That was in order to safeguard the rights of the General Medical Council which by statute was charged with the final formulation of the Pharmacopœia. It was held that those words were quite enough to leave them free from other than moral understanding to adopt what was practical and possible in the international agreement. Austria adhered with the exception of one or two medicines which did not appear in its Pharmacopœia. The United States were in somewhat the same position as Germany. The Pharmacopœia there was the work of the National Convention but the representative of the United States Government was the delegate at Brussels and he adhered to this agreement, which he had a very great hand in settling. The other reservations were trifling and did not at all affect the principle of the matter. The net result was that the 19 governments desired uniformity to be established in their respective countries. The Pharmacopœia Committee of the Council, he thought, would keep in mind the terms of the agreement when it undertook the revision of the Pharmacopœia of 1898. A dispatch containing inquiries drawn up by himself had been addressed by the Colonial Office to the administrations of the British Empire and they hoped in a year or two to have such answers as would enable them to decide on the question of an Imperial Pharmacopœia.

Dr. NORMAN MOORE, in seconding the motion, referred to the enormous labour and the very great diplomatic skill of Dr. MacAlister in carrying through the negotiations. He wished to mention also that the Council had been presented by Dr. Payne with a little book which was a copy of a very interesting Pharmacopœia of 1651.

The report having been approved,

Dr. NORMAN MOORE moved that the Council should express its thanks to Dr. MacAlister for his services and to Dr. Payne for his courteous present to the Council.

Dr. LITTLE seconded the motion which was agreed to.

Finance Report.

Dr. PYE-SMITH moved the adoption of the recommendations of the Finance Committee and the motion was seconded by Mr. TOMES and agreed to. These were that the £1000 received from the builders should be applied towards the reduction of the mortgage of the English Branch Council of the General Medical Council's property; that when the accounts of the Dental Fund for the year were made up the available surplus standing to the credit of the fund should be invested; and that the funds to carry out the suggestions in the second paragraph of the report should be provided by means of a loan from the Pharmacopœia account bearing interest at 3 per cent. repayable by equal annual instalments over a period of five years.

Preliminary Scientific Education and Examination.

Sir VICTOR HORSLEY presented the report of the Committee on Preliminary Scientific Education and Examination. On the second page they found a list of the subjects which the various licensing bodies recognised as elementary biology. That list of subjects was obviously too large. In the discussion last session there was a distinct feeling on the part of many members that if possible the curriculum should be lightened. There was a feeling among many members, especially regarding biology, that students were being carried too far in different directions. The committee did not wish to interfere with the liberty of any teaching or licensing body which might see fit to demand of its students extended courses in various directions, but by way of putting down minimum requirements and considering what was essential they came to certain conclusions on the various subjects which they found were being taught and examined into by the licensing body. They felt that where the curriculum could be lightened was in subjects of general or descriptive botany. The committee was of opinion that for the purposes of the preliminary scientific stage of the curriculum the Council should deal with elementary biology in the same manner as it had dealt with physics, chemistry, and practical chemistry, by defining what should be necessarily included in the syllabus of the subject. The committee considered (1) that the branches to be thus included should comprise the elements of cryptogamic botany and bacteriology, of morphological zoology, and of embryology; (2) that these branches should be illustrated by means of a small number of selected vegetable and animal types; and (3) that the required course of study should throughout have regard to function as well as to structure. In framing its proposals the committee had sought to lighten the curriculum by retaining only those branches of the subject which were not only valuable for scientific training but had also a direct bearing on the subsequent work of the medical student. The branches which the committee, from this point of view, thought it unnecessary to include in the minimal curriculum were general or descriptive botany and the more advanced parts of botanical anatomy, histology, and physiology. The committee accordingly proposed that the following should be added to the recommendations adopted by the Council on May 27th, 1904:—

9. That the synopsis or syllabus in elementary biology should include, as necessary subjects of study, the fundamental facts of vegetable and animal structure, life-history, and function, as exemplified by specified types of cryptogamous plants (including bacteria), of protozoa, and of at least four of the higher animal groups, and the outlines of embryology.

On the motion of Sir VICTOR HORSLEY, seconded by Dr. MACALISTER, the report was received and entered on the minutes.

Sir VICTOR HORSLEY moved the adoption of the committee's recommendation.

Dr. WINDLE seconded the motion.

Mr. THOMSON expressed the opinion that this was one of the cases where they would get more assistance if they gave the licensing bodies a hint about what the Council proposed to do.

Dr. MACALISTER said that they had consulted the bodies not only as to their actual courses but as to their views on the subject. They had a number of valuable answers and there was one from the University of Oxford.

Mr. THOMSON replied that that was not the reply of the University but of the teachers.

Dr. MACALISTER said that all they knew was that this was forwarded by the Council to the committee.

Dr. NORMAN MOORE, speaking as a member of the committee, said that the committee felt that this subject of biology was not one on which a rule could be laid down for ever. It must vary with the progress of medical education. There were many people engaged in medical education who thought the subject ought to be omitted altogether. The Council had considered that question and took the view that at present it ought to be included. This was merely a recommendation.

Dr. MACKAY said that he congratulated the committee on the excellence of its report. The work had been splendidly performed.

Sir VICTOR HORSLEY said it was due to Mr. Thomson to point out that the Council at the last session passed a recommendation that in respect of elementary biology a synopsis or syllabus of the subject should be issued by each licensing body. It was entirely in the hands of the licensing bodies to say how much should be taught.

The recommendation was then adopted.

Medical Companies Bill.

On May 31st, 1904, the General Medical Council passed the following resolution:—

That, in view of the judgment of Chief Baron Palles, the General

Medical Council hope that the Government will take such steps as may be necessary:—

(a) To restrain the registrar of joint-stock companies from registering any new company unlawfully using the term dentist or any similar title which would be likely to lead the public to believe that the members of such company were registered dentists when such is not the case.

(b) To prevent companies already registered from continuing unlawfully to use the term dentist or any similar title which would be likely to lead the public to believe that the members of such companies were registered dentists when such is not the case.

(c) To prevent in like manner the use by companies of unlawful titles which would be likely to lead the public to believe that the members of such companies were registered medical practitioners when such is not the case.

In response to this resolution the following letter was received by the President:—

Privy Council Office, London, S.W.,
21st October, 1904.

SIR,—Referring to your letter of the 1st of June last, I am directed by the Lord President of the Council to state that the Board of Trade, to whom your letter was referred, have intimated to his lordship that in the course of the consideration they have recently given to the claim to registration of "The American Dental Surgeon Specialist, Limited," they have been advised that companies with titles indicating that one of their objects includes the carrying on the business of dentistry, such as the one in question, whether the memorandum does or does not limit the carrying on of the business of dentistry to persons duly qualified to practise dentistry, are entitled to registration so long as the title is not calculated to mislead the public into supposing that the business of the company is carried on by persons having special skill in dentistry; and that the case before Chief Baron Palles (the King at the prosecution of Sydney G. Rowell) was properly decided on this ground; and further, that other forms calculated to deceive may occur which would disentitle the company to registration. The Board's legal advisers added that the title of the American Dental Specialists, &c., appeared to them to be of such a nature as to render it proper that its right to registration should be contested, it being calculated to induce the belief that those who form the company have special qualification in dentistry.

The Board have been further advised that companies, the titles of which do not necessarily indicate that one of their objects includes the carrying on the business of dentistry, but the carrying on of such business is included in the objects clause of the memorandum, are entitled to registration, whether or not the memorandum of association limits the carrying on of the business of dentistry to persons duly qualified to practise dentistry.

The Board are moreover advised that they should exercise their discretion and permit the change of name in the case above-mentioned as it appears to be a change for the better.

I am, Sir, your obedient servant,
A. W. FITZROY.

Sir William Turner, K.C.B., &c., &c., &c.,
President of the General Medical Council.

Mr. TOMES moved, Sir VICTOR HORSLEY seconded, and it was agreed, that the following report by the Medical Companies Bill Committee should be received and entered on the minutes:—

The Executive Committee, at its meeting on Nov. 21st, 1904, considered a communication from the Privy Council respecting limited companies for the practice of dentistry and adopted the following resolution:—"That this communication and a return of the House of Commons obtained by Sir John Tuke be remitted to the Medical Companies Bill Committee for consideration and report to the General Council during the present session and that Sir Charles Ball be added to the committee."

Your committee having considered the correspondence referred to them recommend that an answer be sent to the letter of the Lord President in the following terms:—The General Medical Council beg to acknowledge the receipt of your letter of Oct. 21st and to express their satisfaction that the legal advisers of the Board of Trade concur with the judgment of Chief Baron Palles and hold that titles which are calculated to deceive the public into supposing that they will receive treatment by persons possessed of special skill in medicine or in dentistry would disentitle the company to registration.

This is, so far as it goes, a step in advance, for hitherto it would appear that registrars did not consider this any part of their duties, but that they were called upon to register any company under any title so long as the formalities of the Acts were complied with. But it is, at best, a very partial remedy for the evils which have been from time to time pointed out by the General Medical Council as arising from company incorporation, as is indeed indicated in the last two paragraphs of your letter, in which it is pointed out that, if it takes a title to which objection is not taken, a company may take powers in its objects or in its memorandum of association to conduct medical or dental practice without its being restricted to the employment of duly qualified persons. The inadequacy of the mere avoidance of a title containing objectionable phrases as a protection against the evils complained of is further illustrated by the Parliamentary return of companies registered for the "specific purpose of conducting medical or dental practice," obtained from the Board of Trade at the instance of Sir John Tuke. A cursory examination of the pages of a single medical journal for three years (the *British Medical Journal*) discloses the names of no less than seven medical companies, the proceedings of which have been condemned in the medical press, and one of which has on several occasions been subject to severe comment in the findings of coroners' juries. Owing to the limitations imposed by the words "for the specific purpose" in the Parliamentary return, not one of these companies appears in that list. Similarly, nine companies which have been the subject of comment in the general press within the last two years are absent from the Board of Trade list, whilst a number of dental companies, formed immediately after conviction by persons who have been prosecuted and convicted under the Dentists Act, are also absent from the list. It therefore becomes necessary to ask the attention of the Lord President to a brief statement of the facts as they appear to the General Medical Council. We believe the objects of legislation in regard to company formation to have been essentially financial, so that due protection should be afforded to legitimate financial enterprise, and that the incorporation of companies for purposes other than this was not contemplated in the Acts. In support of this view we may recall the circumstances attendant upon a previous attempt at legislation. In 1899 we were so far successful in demonstrating the existence of a crying evil that a short Bill was introduced in the House of Lords, the object of which was to render companies equally liable with individuals to the provisions of the Medical and Dental Acts. This Bill was, by Committee of the House of Lords placed as two clauses in the Companies Acts Amendment Bill then before the House. From this Bill the two clauses were expunged in the Committee stage in the House of Commons after the Standing Committee on Trade had decided by a considerable majority to retain them. They were dropped out on the ground that they were not germane to the general tenour of the Bill, the objects of which were financial.

We contend and believe that we have fully established that these medical and dental companies for the most part have been incorporated for purposes quite other than financial; indeed, in a large majority of them the subscribed capital is merely nominal, and is the smallest amount which will comply with the requirements of the Acts—namely, about £8. Moreover, circulars have been sent out by company agents, recommending company incorporation as a means of evading the prohibitory clauses of the Medical and Dentists Acts. It is therefore evident that some other object has been in view in their incorporation, and we proceed to point out its presumable nature. A limited company appears to be in a different position from an individual in two principal respects. It has been able to make use of titles prohibited by the Medical and Dental Acts without being, as an unqualified individual would have been, liable to prosecution and fine. By the new interpretation which has been placed upon the duties of the registrars of companies, this may be to a considerable extent remedied in the case of future companies, though, as already indicated, their freedom to put anything into the memorandum of association, or into the objects for which the company is formed, weakens the protection to the public thus afforded, and encourages methods of evading existing statutes. Beyond this, and of equal or greater importance, is the avoidance of any personal responsibility; and it has already been pointed out that some of the companies whose conduct has been the most flagrant have already avoided putting anything into their title which would bring them into the Board of Trade return. The servants of such a company may be, and have been, by means of lectures, pamphlets, advertisements, &c., placed in such a position that the public is led to suppose that they will receive skilled medical or dental treatment at their hands, and they may display ignorance or commit malpractice and even be censured by a coroner without any legal remedy being available against them. They are the irresponsible agents of an irresponsible company. The company itself has committed no offence known to the law and so a protection is afforded to unqualified persons actually greater than that enjoyed by the qualified practitioner who is required to possess reasonable knowledge and to have exercised reasonable care and skill. Instances can be cited, if necessary, in support of this proposition. The General Medical Council therefore express the hope that the Government will take such steps as may be necessary to prevent the provisions of the Medical and Dental Acts being evaded by persons improperly taking advantage of the provisions of the Company Acts. And the General Medical Council will, if it is desired, be prepared at the proper time to furnish detailed evidence in support of the propositions which they have advanced.

Mr. TOMES moved:—

That an answer be sent to the letter of the Lord President in the terms contained in the report.

He pointed out that it did not follow that the decision would be retrospective, that companies which had been registered with medical or dental titles would not be allowed to continue to use these titles. This very point was, however, being raised in the Irish courts at the present moment.

Sir VICTOR HORSLEY seconded the motion which was agreed to.

Dental Board of Victoria.

The report by the Dental Education and Examination Committee on an application from the Dental Board of Victoria for the recognition of its diploma was entered on the minutes. In this report it was stated that:—

In the year 1898 two gentlemen who had obtained the licence of the Dental Board of Victoria applied to be registered in the Colonial List, tendering papers in support of their application which appeared to show that they had passed through a curriculum which was considered by the Council to be roughly the equivalent of that required by the licensing bodies in Great Britain and on this ground their application was granted. Shortly afterwards a communication was received from the Dental Board of Victoria pointing out that at the time when these gentlemen were examined and their licences granted the regulations which they had submitted in support of their application were not in force and that in fact at that date no curriculum whatever was in force, so that their admission to examination was no proof of their having passed through one. No imputation of bad faith lay upon these gentlemen who appear to have been unaware of the change which had taken place since they commenced their course of study. But in fact the Dental Board had been told on high legal authority that they had acted *ultra vires* in establishing a curriculum under the Colonial Act of 1887. Though not relevant to the present issue it may be mentioned that they were asked for the production of full evidence as to their curriculum, which has never been completely furnished. In 1899, under a new Colonial Act giving the requisite authority, a fresh curriculum was established and in the following year the Dental Board of Victoria applied that their licence might be registered in this country. Acting upon a report of the Dental Education and Examination Committee, the Council refused to accede to this application on the ground that the new curriculum was deficient in general subjects, though adequate in the special subjects, and that it was intended to teach an outline of medicine and surgery,

&c., at the special school without attendance at any general hospital being required. Sundry criticisms were also offered on the rules governing the examinations. In February, 1904, the Dental Board again brought out a fresh series of regulations, which were submitted to the Council in May, 1904. On that occasion Mr. Merrill, a member of the Dental Board of Victoria, met the Dental Education and Examination Committee and explained certain difficulties under which they laboured in the colony, at the same time expressing willingness to bring their requirements, if possible, into harmony with those in force at home; but the committee did not recommend the recognition of the licence as it then stood and the Council adopted their report. On Mr. Merrill's return to Australia it would appear that action was speedily taken, with the result that once again the curriculum required has been modified and their application for recognition of the licence is now renewed.

The alterations made are very considerable and may be summarised as consisting in a much closer affiliation with the University of Melbourne and in the introduction of a period of attendance at a general hospital. The University of Melbourne institutes a Dental Faculty and a degree to be called Bachelor of Dental Surgery. The Dental Board agrees that the Dental College shall become a school of the University and that it and the Dental Hospital shall be open to the inspection of the University authority; that the examiners appointed for the Board's licence shall be the same as those appointed by the University for its degree; and that the lecturers, demonstrators, &c., of the Dental College shall be appointed subject to the approval of the Dental Faculty of the University. Moreover, that no change shall be made in the requirements of the Board for its licence without the approval of the University. Thus the University of Melbourne, a body whose medical degrees are recognised for registration in this country, has rendered itself to a very large extent responsible for the action of the Dental Board, of the College, and of the Dental Hospital, a site for which it has granted. This arrangement, however, though apparently agreed upon by both parties, had not passed into the form of a statute, but since the Council has been sitting a telegram has been received stating that it has been ratified by the Senate. It is terminable at any time by mutual consent or by a year's notice on either side.

As regards the curriculum, the difference in principle which led to the rejection of the previous applications—namely, the absence of any courses at a general hospital—has disappeared, but it remains to consider whether the amount of general study introduced is sufficient to be regarded as, generally speaking, the equivalent of our own. The period of attendance upon general hospital practice is nine months, whereas—to take, for example, the most recent regulations of the English College of Surgeons—for its licence in dental surgery two winter sessions are required here. Without exact and detailed correspondence in other respects the curricula are similar. The student in Victoria is required to pass four examinations, one at the end of each year, but a feature which was the subject of adverse comment on a previous occasion still remains—namely, a supplementary examination to be held not less than six weeks after the principal examination at which a student who has failed may present himself for re-examination in a single subject if he has only failed in one subject, but in all subjects if he has failed in more than one subject. It is obvious that a student who has failed in several subjects cannot within so short a period have done much to strengthen his weak points.

The requirements of the Board as to preliminary examination appear to be satisfactory and the committee recognise that an effort has been made to bring the curriculum into conformity with that obtaining here. The committee, after considering the facts set out above, recommend that the Licence of the Dental Board of Victoria be recognised, subject to the following conditions:—That recognition be accorded only to those Licences which are granted to students who have passed through the entire curriculum. That the recognition be during the continuance of the agreement between the Dental Board and the University of Melbourne, and that notice of any alteration in this arrangement should be immediately forwarded to the General Medical Council. That, like the licensing bodies in the United Kingdom, the Victorian licensing body furnish complete returns of all of its examinations. And the committee would remark that, inasmuch as the examinations of the licensing bodies in Great Britain have been inspected by the General Medical Council, and are always liable to such inspection, which is impossible in the case of a distant colony, the General Medical Council will only be able to judge of the "sufficiency" of the examinations by the proportion of passes and rejections, which may be fairly expected not to differ greatly from the proportion which an experience of 25 years has shown to obtain at the examinations of the several licensing bodies in Great Britain.

Mr. TOMES moved that the recommendation of the committee be adopted.

Dr. LINDSAY STEVEN seconded the motion which was agreed to.

Students' Registration Committee.

Sir HUGH BEEVOR moved, and Dr. NORMAN MOORE seconded, the adoption of a report by the Students' Registration Committee on exceptional cases and on the application for the approval of certain teaching institutions. The latter part of the report stated that the committee recommended that the Halifax Municipal Technical School (day classes) recognised by the English Conjoint Board should be added to the list of recognised institutions approved by the Council. It was also recommended that the South African College, Cape Town, should be similarly recognised. The college was already recognised by the Universities of Edinburgh and Glasgow.

The motion was carried.

Election of President.

Strangers then withdrew in order that the Council might consider *in camerâ* the mode of procedure in the election of a new President. When the public were readmitted,

The PRESIDENT (Sir WILLIAM TURNER) said: Gentlemen, I would recall to your recollection that in the opening remarks which I made at the beginning of the session I intimated that it was my intention to resign the presidential chair before the conclusion of the session. We have now arrived at the last day of meeting of the Council. Our business for the session is almost completed and I wish now to resign this chair from the time when you have elected my successor because I think it is probably the wish of the Council that I should remain in the chair until my successor is elected, so that when he is elected and when he appears in this room after his election I shall vacate the chair and duly induct him into it. In tendering, then, in this formal way my resignation I shall briefly express to you, what I had the opportunity of expressing in a more informal way at a private meeting of the Council to which you were good enough to invite me, my deep acknowledgment of all the kindness that I have received from you personally, of the sympathy that I have met with and of the support I have received in the discharge of my presidential duties, some of which, I admit, were from time to time of a somewhat trying character. In stating this to you, gentlemen, I wish to say further that if in the course of the discussions which have gone on in the Council I have ever, in word or in manner, done anything or said anything to hurt the feelings of any member of the Council I shall most respectfully ask his pardon. Well, gentlemen, my resignation is now duly made to you. You will proceed to the election of my successor and then I shall vacate the chair.

Sir PATRICK HERON WATSON said that it was with the greatest regret that he rose to propose the election of another occupant of the chair which Sir William Turner had filled with so much delicacy, dignity, and kindliness whilst he had been President of the Council. He was thankful that they had around the table of the Council gentlemen possessed of the same keenness of judgment, the same quietness of disposition, and the same resolution of purpose as their retiring President. The person whom he would propose on this occasion was one whom they knew had well merited the regard, esteem, and affection of every member of the Council. He was a man who had been marked out as possessing qualities of no ordinary character, of high moral power, and absolute self-restraint in the conduct of all he had to do. He need hardly say that this person was Dr. MacAlister. It seemed hardly necessary to refer to his qualifications. They had only to refer to the position which he had occupied at Cambridge. Being a Scotchman and having been brought up in a country district in Scotland, he had so distinguished himself that at Cambridge he had won a rare reputation for his mental powers. He could hardly conceive anyone at the board of the Council or elsewhere who could meet their requirements better than Dr. MacAlister. It was with confidence and with the greatest pleasure that he nominated him as successor to Sir William Turner.

Dr. PYE-SMITH said that he had been asked to second the motion proposed by the senior member of the Council. In doing so he need only associate himself heartily and warmly with all that the latter had said of their obligation to Sir William Turner. He would also associate himself with equal heartiness with him in his expression of confidence in Dr. MacAlister.

Sir WILLIAM TURNER having put the motion, declared that Dr. MacAlister had been elected President. The announcement was received with applause. Dr. MacAlister, who had previously retired from the room, was introduced in his capacity of President by Sir Patrick Heron Watson and Dr. Pye-Smith. He was received with further applause and shook hands cordially with Sir William Turner.

Sir WILLIAM TURNER then said: Dr. MacAlister, I have great pleasure in welcoming you to take the presidential chair.

Dr. MACALISTER then took the chair and all the members of the Council having risen to their feet he said: Gentlemen, you will not expect a speech from me on this occasion. There are two thoughts which come into my mind which I must express. One is the deep debt of gratitude that I owe to you for the honour you have done me, which I consider the greatest honour of my life, by reposing your confidence in me. The second is the deep sense indeed of the weight of the trust and responsibility you have placed on my shoulders. I feel I could not sustain that weight if I had not the assurance, which I am perfectly sure each member of the

Council will be willing to renew to me, that I have your support and coöperation in whatever is best for the Council and in the conduct of its business. I have learned, during a somewhat long service as the chairman of the Pharmacopœia Committee and of the Business Committee, to coöperate for the improvement of our proceedings with almost every member of the Council. I have learned, therefore, to work with you individually. I hope you will continue to work with me in the new responsibilities which you by your votes have imposed upon me. I thank you for the honour you have conferred on me and I would like to shake hands now with every member of the Council.

All the members of the Council present then filed past the presidential chair, each as he passed shaking hands with Dr. MacAlister and offering him congratulations.

The Council, with Dr. MacAlister in the chair, then proceeded to dispose of the remaining business on the programme.

New or Amended Regulations.

Dr. NORMAN MOORE moved:—

That in the opinion of the Council it is desirable that when new or amended regulations are adopted by the Council a formal statement should be placed on the minutes as to the effect of the new or amended regulations upon previous regulations on the same subject.

He said that owing to what had occurred during the present session of the Council an authoritative statement on this matter was required. He thought that if his motion were carried it would add to clearness and save trouble.

Dr. MCVAIL seconded the motion which was agreed to.

Registers of Medical and Dental Students.

Dr. MACKAY proposed the following motion:—

That the Council reaffirms its resolution No. 3 upon the minutes of its meeting of May 30th, 1904, in so far as that resolution refers to the establishment and maintenance of registers of medical and dental students, but without reference to the financial proposals therein contained, and remits to the Executive Committee to formulate a scheme for carrying the resolution into effect and to report thereon.

Sir WILLIAM THOMSON seconded the motion.

Sir CHRISTOPHER NIXON appealed to Dr. Mackay to postpone this motion till the next session of the Council.

Dr. MACKAY by leave withdrew his motion.

Diplomas in Tropical Medicine.

The following communication from the University of Liverpool was considered:—

Oct. 28th, 1904.

GENTLEMEN,—I beg to apply on behalf of the University of Liverpool for recognition by registration in the Medical Register of the diploma in tropical medicine of that University.

I inclose circulars showing the conditions under which the diploma is granted, from which you will observe that it is only conferred upon medical practitioners.

I am, Gentlemen, your obedient servant,
B. MOORE,
Dean of the Faculty of Medicine.

The PRESIDENT said that the answer which he suggested the Council should make to this communication was that in the absence of legislation enabling them to do so the Council had no authority to authorise the registration of the diploma of tropical medicine as an additional qualification.

The suggestion of the President was agreed to.

Mr. BROWN asked the President whether the Senate of the University of Cambridge had communicated to the General Medical Council its decision to establish an examination and to grant diplomas in tropical medicine and hygiene.

The PRESIDENT replied that no such communication had been made to the Council.

Reports of Inspectors and Visitors.

Sir JOHN BATTY TUKE moved:—

That the legal advisers of the Council be requested to state an opinion on Sub-section 3 of Section 3 of the Medical Act (1886), whether the obligation rests on the Council to forward the reports of inspectors and visitors to the Privy Council in their entirety, irrespective of what they may contain.

Dr. MACKAY seconded the motion which was agreed to.

Sir WILLIAM THOMSON moved:—

That the report of an inspector and a visitor regarding any examination shall in the first place be sent to the President of the Council for perusal so that, should the meaning of any remarks or conclusions made thereon appear to be obscure the matter may be referred back to the inspector and the visitor for explanation before the report is formally submitted to the Examination Committee.

He said that he merely desired that the document should be edited and should come down to the Examination Committee without any liability of being misapprehended. They should not then have to say that they could not understand some of the observations of the report.

Dr. BRUCE seconded the motion.

Mr. BROWN moved as an amendment that the motion be referred to the Executive Committee and that it should draw up a report on what alterations should be made in the standing orders.

Dr. LINDSAY STEVEN seconded the amendment.

After a brief discussion both the motion and the amendment were withdrawn.

The Treasury and the Council.

Sir CHRISTOPHER NIXON moved:—

That in forwarding the reply of the General Medical Council to the letter of the Privy Council of Nov. 1st this Council desires to bring formally before the Lord President the suggestion made in the memorandum of the President of the Council, dated May 1st, 1903, that the Treasury should be urged to grant a sum sufficient to defray the expenses of the disciplinary functions of the Council.

Sir WILLIAM THOMSON seconded the motion.

Sir JOHN BATTY TUKE thought that this was a hopeless motion. It had not the slightest chance.

Mr. TOMES asked Sir William Turner if he ever took any steps in asking for a grant.

Sir WILLIAM TURNER said that he had on more than one occasion taken steps in asking for a grant. Government officials wanted to save the Treasury from making grants if the money could be got in other directions. He felt that there was serious opposition in the Council to proposals to raise the money they required either by a registration fee on students or by increased fees to be put on those who for the first time came on the Medical Register. It seemed to him that the Council should endeavour to see if it could not, through an immediate communication to the Privy Council, get the latter to approach the Treasury on this matter. Unless they made up their minds and let it go to the Privy Council and the Treasury that this was their unanimous desire, he quite agreed with those who said that they would make nothing of it. If they could let it be known that it was their unanimous wish, then he ventured to point out that there were sufficiently strong arguments which could be brought to bear. They might by their persistency, perhaps, prevail upon the Treasury authorities to make an allowance to them. A sum of £1500 a year would meet all that was required. It was no use going to the Treasury with a divided Council.

Dr. NORMAN MOORE suggested that it would be better to postpone the consideration of this motion till the next session of the Council.

Sir CHRISTOPHER NIXON said that he gathered it was the desire of the Council that the motion should be withdrawn.

The motion was by leave withdrawn.

This exhausted the business on the programme and the session ended.

LIFE ASSURANCE MEDICAL OFFICERS ASSOCIATION.

INSANITY AND EPILEPSY IN RELATION TO LIFE ASSURANCE.

A MEETING of this society was held on Oct. 5th, and adjourned to Nov. 2nd, Sir DYCE DUCKWORTH, the President, being in the chair.

Sir WILLIAM R. GOWERS read a paper on Insanity and Epilepsy in Relation to Life Assurance, which was published in full in THE LANCET of Oct. 15th, p. 1061.

The PRESIDENT said that the duty of assurance medical officers was to hold the balance between what was legitimate in medicine and what was legitimate for the benefit of the offices. His experience was that the history of an applicant for assurance having an insane relative was far from uncommon—perhaps nearer one in 25 than one in 50. He believed that suicides had become more frequent in recent years and that among assured persons the great majority of them were the result of financial pressure.

Dr. G. H. SAVAGE said that he agreed almost entirely with the opinions expressed by Sir William Gowers in his summing up. To say definitely that people suffering from insanity should or should not be assured was beside the mark: each individual case must be considered. If a patient had an attack of melancholia before he was 25 years of age he would probably not recommend the assurance

of his life; if there had been two attacks he would not recommend the life on any consideration. This was not only on account of the suicidal tendency but because persons suffering from melancholia were likely to develop secondary troubles. The melancholic type was also very readily transmitted by heredity, on which account he would hesitate to recommend a life when there was a history of melancholia among the ancestors (parents or uncles). There had been some cases in which he had recommended the assurance of the life of a lunatic.

Dr. CHARLES A. MERCIER said that among the insane there were both insurable and non-insurable cases. In no circumstances would he recommend a life in a case of acute insanity which was either now existing or had recovered, but he would not extend that prohibition to cases in which the acute insanity had been followed by a permanently damaged brain and a chronic insane condition, for, as Dr. Savage had said, such lives were often prolonged beyond the natural span. Epilepsy *per se* need not render a life uninsurable. Paranoia *per se* had no tendency to shorten life and fixed delusion as a rule had no tendency to shorten life.

Dr. G. A. HERON said that before giving an opinion as to assuring the life of an insane person it would be advisable for the ordinary life assurance officer to obtain the advice of a specialist in insanity. When applicants for assurance had a strong hereditary tendency to insanity the prospect of their living easy lives or otherwise ought to be considered, for worry was a frequent cause of insanity.

The discussion was then adjourned to Nov. 2nd.

On that day Sir DYCE DUCKWORTH was again in the chair and the proceedings commenced with a paper read by Dr. ROBERT JONES on Insanity and Epilepsy in Regard to the Duration of Life. Of this paper we have only space to print the conclusions which were as follows. 1. Insanity *per se* was inimical to life. It was a deterioration, mental and physical. It caused more deaths in every quinquennium among the certified insane in asylums than in corresponding periods among the general population. Cases least affected were those holding fixed ideas, sometimes called paranoiacs or persons suffering from delusional insanity, as were also those in whom an acute attack of insanity had left moderate but chronic weak-mindedness. Congenital weak-mindedness diminished the expectation of life. 2. The most powerful and the most frequent antecedent of insanity and of epilepsy was either ancestral insanity or epilepsy. 3. All medical forms of inquiry used in insurance offices should ask whether there was a history of ancestral insanity (parents and grandparents) and collaterals (uncles and aunts). 4. A suicidal tendency was eminently heritable—often appearing at the same age in the offspring as in the ancestor. 5. Suicides in asylums occurred less frequently by one half than in the general population during the period of greatest liability. 6. Phthisis was a strong converging factor towards insanity. 7. Epilepsy shortened life—more so by an average of ten years than insanity. 8. Antecedent syphilis in many assurable cases could not be definitely ascertained either by admission of the fact or by its sequelæ and general paralysis occurred not more often than in about 1 per cent. of all cases which had contracted syphilis.

Dr. CLAUD MUIRHEAD contributed a paper entitled "Notes on the Family Histories of 127 Suicides who were members of the Scottish Widows' Fund Assurance Society at the time of their death." These deaths were all of males, occurred during the period 1874 to 1894 inclusive, and were equivalent to 2·13 per 10,000 living. The number of males of 20 years of age and upwards in England and Wales per 10,000 living who committed suicide amounted to 2·17. The number of male suicides in Prussia per 10,000 living between the years 1869–90 amounted to 2·73. Farr in his "Vital Statistics" quoted from the tables of the Equitable Assurance Society of 1834 to the effect that about 2·0 per 10,000 assured in that society had been found to commit suicide every year. It would thus appear that the number of deaths from suicides among the assured had not materially increased during the last 60 years and that the number among the assured and the community at large in England and Wales was very nearly alike. Dr. Muirhead investigated the family history of these 127 suicides so far as it was revealed in the schedules with the remark that inquiry under this heading was limited as a rule to the immediate family—i.e., to father, mother, brothers, and sisters. The result was that only a very small number (11 in all) of neurotic relatives were disclosed in the family histories of the 127 suicides. Dr. Muirhead had made a similar investigation with regard to the importance of heredity in phthisis and had come to the conclusion that the occurrence of both neuroses and phthisis in the family history had been immensely overrated as adverse factors in life assurance.

Dr. SIDNEY COUPLAND said that people who were chronically insane were protected from the stress and turmoil to which sane people were subject and that no doubt was one reason why many of them lived to a great age, but the general asylum mortality was very much higher than that of the population at large, the average age at death in all insane institutions being about 50 years. It would therefore seem that insanity, or rather some forms of it, was an indication of inherent imperfection of tissue that conduced to premature death. Insanity was so often the outcome of physical ill-health that its existence in an applicant for insurance would not add anything to the ground for rejection, because the applicant would be rejected on the physical ground. An insurance society might be doing an injustice to itself in rejecting an insane person because he was a potential suicide. The proportion of suicides in asylums was not very much more than the proportion of suicides amongst the whole of the community.

Dr. R. PERCY SMITH said that there were many patients in asylums whose lives were assurable and would be very profitable to the offices which accepted them. The risk of suicide in asylums was very small. General paralytics ought not to be accepted on any condition but unfortunately the disease was sometimes overlooked and he had two or three times seen general paralytics who had been recently accepted as first-class lives at an insurance office.

Dr. R. HINGSTON FOX said that the present mortality of the insane, excluding the pauper class and idiots, was about 6 or 7 per cent., that is, about three times the mortality of the general population over the age of 20 years. There was an enormous excess of deaths from phthisis in the insane. The death-rate from phthisis in asylums was 11 times that which was recorded amongst insured males in the Scottish Widows' Fund Assurance Society—namely, 155 against 13·5 per 10,000. The facts were similar with regard to bronchitis and diseases of the heart and kidneys. Not only was the death-rate from all these causes higher but the deaths occurred at an earlier age than among the sane. Dr. Fox considered that a family history of insanity was an adverse factor in life assurance, not merely for the risk of the occurrence of insanity in the proposer, but for the greater risk that some other form of vital weakness might be derived from the stock, the insanity being an evidence of that weakness.

Dr. F. DE HAVILLAND HALL gave the results of an examination which he had made of the statistical records of the Rock Life Office, extending over nearly the same period of time as Dr. Muirhead's statistics and relating to 3068 cases; many remarkable discrepancies, however, existed between his results and Dr. Muirhead's. For instance, in Dr. Muirhead's cases the proportion of general paralysis was five times as great as among his own. He was afraid that unless all syphilitic applicants were excluded there would occasionally be considerable losses to insurance companies by early claims for cases of general paralysis. He was strongly opposed to the waiving of the suicide clause; the knowledge that his family would be left unprovided for would in some instances act as a deterrent to a would-be suicide.

Dr. S. W. CARRUTHERS sent a communication which was read by the secretary. It was largely statistical and dealt chiefly with the family history of insanity, with the death-rate from insanity among insured lives, with suicide, and with epilepsy.

Dr. F. PARKES WEBER said that two years ago he published a short note on Syphilis in Relation to Life Assurance[1] upholding the view that syphilis was an important factor in the causation of fatal disease. He believed that assurance losses from general paralysis could not be prevented even by declining every applicant presenting a history of syphilis. Insured persons attacked by general paralysis either contracted syphilis after insuring their lives or else at the time of insurance they did not know that they had syphilis or wilfully withheld the fact. In conclusion he referred to the bearing of agoraphobia and acrophobia on life assurance.

[1] THE LANCET, Sept. 27th, 1902, p. 867.

THE LANCET.

LONDON: SATURDAY, DECEMBER 10, 1904.

The Session of the General Medical Council.

THE session of the General Medical Council which came to an end last week was an interesting and important one. As we have already said, it was not marked by any medico-political innovations but the questions arising out of the routine work of the Council, no less than the recurrence of questions that had been previously debated by the Council, became the subject in many cases of important developments. The overloading of the medical curriculum, the place in that curriculum of the preliminary scientific studies, the pecuniary position of the Council, the registration by Act of Parliament of medical students, and the registration of joint-stock companies for carrying on medical practice were all discussed by the Council with an attention to detail that showed the members to be aware of the great interests confided to their charge. The present position of the last two questions is by no means satisfactory and we advise all our readers to study the debates upon them closely, for the political position of the General Medical Council, and therefore its utility as a safeguard to the public, may be affected by the existing condition of things. Six months ago the General Medical Council resolved by a large majority to ask the Privy Council to introduce a Bill granting to the General Medical Council power to institute a register for medical students and to charge a fee of £1 for registration. The English Royal Colleges objected to the resolution which to their minds tampered with their corporate prerogatives, but it was assumed that this represented to a great extent the opposition to the suggested legislation. A communication, however, from the Privy Council read at the recent session of the General Medical Council showed that the University of Oxford, though from a different standpoint, shared the feeling of the English Royal Colleges and the Privy Council proposed that the General Medical Council should hold a formal conference upon the subject with the different qualifying bodies. This indicated that the General Medical Council was only likely to obtain the support of the Privy Council for an Act to impose registration upon medical students if the various qualifying bodies were substantially of one mind in the matter. This clearly not being the case the General Medical Council preferred to postpone all idea of the registration of medical students—the only dignified course open to the Council but one which leaves it face to face with growing pecuniary embarrassment. For whatever other advantages or disadvantages the suggested legislation would have had it would undoubtedly have created a source of income for the Council.

The question of the registration of joint-stock companies to carry on dental (and for that matter medical) business was left in a similarly unsatisfactory position. The General Medical Council at the last May session passed a resolution hoping that the Government would take steps—

(*a*) To restrain the registrar of joint-stock companies from registering any new company unlawfully using the term dentist or any similar title which would be likely to lead the public to believe that the members of such company were registered dentists when such is not the case.

(*b*) To prevent companies already registered from continuing unlawfully to use the term dentist or any similar title which would be likely to lead the public to believe that the members of such companies were registered dentists when such is not the case.

(*c*) To prevent in like manner the use by companies of unlawful titles which would be likely to lead the public to believe that the members of such companies were registered medical practitioners when such is not the case.

This resolution was submitted to the Law Officers of the Crown whose opinion has been communicated to the Council through the medium of a letter addressed to the President of that body by the clerk of the Privy Council. This letter, which we publish in full on p. 1654 of this issue of THE LANCET, showed that in the opinion of the Privy Council companies registered for the specific purpose of carrying on medical and dental business possessed a legal medical status. Although the communication applied specially to the practice of dentistry it was evident it did so equally to the practice of medicine, and the medical profession now know on the highest legal authority what the actual position is, the position which we have already described as Gilbertian. And is it not so? The Medical and Dentists Acts were enacted more for the safety of the public than for the protection of medical men and dentists. The primary object of the Medical Acts was to enable "persons requiring medical aid to distinguish qualified from unqualified practitioners"; and that of the Dentists Act to make provision for the registration of persons specially qualified to practise as dentists. Under the Companies Acts these primary objects are disregarded, for power is conferred on unqualified persons to receive official recognition in such degree as to constitute a distinct infringement of the Medical Acts. As we stated in a recent article it is possible under the Companies Acts for seven ignorant persons to become a collective medical or dental practitioner if they take proper precautions. In the letter from the Privy Council these precautions are enunciated. These seven persons must not when applying for registration endeavour to assume the style and title of, let us say, "Quackenboss and Co., medical practitioners and dentists." If they so designate themselves it is held that such form, style, or title might be calculated to deceive and might disentitle the proposed company to registration. The assumption of such a form might be contested as it would be calculated to induce the belief that those who form the company have special qualifications. But (and the "but" is a big one) if these seven persons in the "objects clauses" of their memorandum of association indicate that one of their objects is the carrying on of the business of dentistry, and presumably of medical practice, they are entitled to registration, whether or not the memorandum of association limits the carrying on of the business to persons duly qualified to practise dentistry or medicine. "Quackenboss and Co.," in order that the public may not

be misled, must restrict themselves to the simple style, but in the "objects clauses" of their memorandum they can indicate that they propose to act as medical practitioners or dentists, can advertise their intention, and become registered under Act of Parliament. The letter of the clerk of the Privy Council to the General Medical Council contains a suggestion that companies already registered, and offending as to title, should amend their ways by a change of name! This can only be interpreted as a suggestion from the Privy Council Office that bogus companies should adopt more subtle methods of carrying out measures calculated to deceive The Medical Companies Bill Committee of the General Medical Council has made a temperate report upon the extraordinary position and this is by resolution of the Council to be forwarded to the Privy Council, with the result, it is to be hoped, that that august body will see the dangers of the existing situation.

A third important matter was discussed during the session with a liveliness verging on acrimony, as will be seen by our report this week, for a vigorous debate ensued upon the presentation of the report of the Examination Committee upon the final examination of the University of Edinburgh. The final examination of the University of Edinburgh was visited and inspected for the Council by Sir GEORGE PHILIPSON and Mr. T. BRYANT respectively, and as will be gathered, from the full abstract of the report which we publish, the visitor and the inspector were not able to hold a favourable opinion of everything that they saw. Roughly speaking, with three-fourths of the proceedings at the final examination as conducted at the University of Edinburgh Sir GEORGE PHILIPSON and Mr. BRYANT were satisfied, but with one-quarter, the portion of the examination dealing with clinical surgery, they were frankly dissatisfied. With regard to that portion of the examination they reported that it was not thorough, inasmuch as the candidate was usually only given one case upon which to display his clinical and therapeutic acquirements, while the circumstances in which he was tested in surgical anatomy and surgical procedure were such as to prevent an adequate display of knowledge or a proper trial of the same. It appears that during the visit and inspection of Sir GEORGE PHILIPSON and Mr. BRYANT the friends and visitors, male and female, of the patients, who were being used both as test cases and lay figures, were being admitted to the wards. As a result it was not possible always to expose the patient's body properly in the manner that was essential for examination purposes, so that, as a practical scrutiny of the ability of the candidate to undertake a surgical operation, the examination became wanting. Upon this report being received by the Examination Committee of the General Medical Council that committee recommended, having regard to the expressions of approval of much of the examination which the visitor and the inspector had used, that the Council should direct that a further inspection be made of the surgical part. Thereupon a debate ensued, in the course of which Sir WILLIAM TURNER took the strong line of speaking from the chair as the direct advocate of the University of Edinburgh. He appeared to accept as true everything complimentary that had been said about the final examination of the University and appeared to doubt the truth of any of the strictures. It is always inconvenient when gentlemen of high standing and position begin to question each other's accuracy and the calling for the diaries of the visitor and the inspector, though doubtless quite in order, introduced an element of awkward personality into the discussion. Sir GEORGE PHILIPSON and Mr. BRYANT had clearly said that while they were present in the wards observing the candidates being examined in operative surgery visitors and friends of the patients were also present. If it is suggested that there were no such visitors and no such friends a serious charge is brought against the accuracy of the visitor and the inspector appointed by the General Medical Council, while the admissions of the Faculty at Edinburgh, who, having read the report of Sir GEORGE PHILIPSON and Mr. BRYANT, regret this exact occurrence, appear unnecessary. It seems to us that Sir GEORGE PHILIPSON and Mr. BRYANT were treated with scant courtesy. They made an honest report on what they saw, and some of the remarks which followed upon that report amounted to attacks not only upon their judgment but upon their truth. We suppose that the idea of the General Medical Council in sending visitors and inspectors to report on the examinations of the different qualifying bodies is to learn if evils are existent which are remediable. These offices will become thankless indeed if the visitor and the inspector are not credited by the Council as a whole with having discharged their important commissions in a single-hearted and faithful manner. We cannot help feeling that Sir WILLIAM TURNER should have made his own position very clear before taking so strong a line as he did. As the representative of the University of Edinburgh it was right and natural that he should try to secure justice for that admirable educational centre. The university or corporation supplying the President of the Council ought not to be disfranchised, but the President when speaking as a pure representative should be careful to dissociate himself from his presidency.

The Etiology of Scurvy.

THE recent return of the South Polar Expedition on board the ship *Discovery* has naturally given rise to a large amount of interest from many points of view. The full results of the scientific investigations that were conducted cannot be made known for some time. The expedition was compelled to spend two years in the Polar regions, so that observations made in the first year could be checked and completed in the second, with all the additional insight derived from the former experience. We intend at the present time only to refer briefly to the experiences of the crew in regard to scurvy. This disease was fortunately but little in evidence. An outbreak occurred while the commanding officer, Captain SCOTT, was absent on a sleighing expedition. On his return he forbade the use of all preserved food; the scurvy ceased and did not reappear. Subsequently the meat eaten was all fresh—namely, penguins and seals. According to the opinions of members of the crew penguin is said to be "not bad" and seal flesh "A 1."

The etiology of scurvy has been the subject of much

discussion on account of its supreme importance in connexion with the health of the crews on ships engaged in long voyages. Since the introduction of steamers, however, the disease has not committed the ravages that were experienced in former years and in the Navy it has practically disappeared. The experience of explorers in the Arctic and Antarctic regions still indicates that unless stringent precautions are adopted the success of the whole expedition may be placed in jeopardy by the appearance of the malady. For many years it has been considered that the want of fresh vegetables is the main etiological factor. As an adjuvant in staving off the disease lime-juice has been held in high esteem. During a discussion at the Epidemiological Society in March last[1] Dr. E. F. WILLOUGHBY referred to the theory elaborated by Dr. TONK of Christiania which has been implicitly accepted by all the medical authorities in the Scandinavian marine. While fully satisfied that the essential pathological factor in scurvy is, as has been shown by various observers, an excess of acidity or want of alkalinity of the blood, Dr. TONK maintains that this condition of the blood does not explain the actual etiology under which this phenomenon is brought about. He therefore suggests that scurvy is due to the presence of some toxic material in the food that has been partaken of. The possibility of such an exciting cause is supported by the fact tha the diet on such expeditions as we have referred to has consisted largely of tinned foods, these being so easily carried on board the ships. Inspector-General ALEXANDER TURNBULL, in opening a discussion on this subject at the annual meeting of the British Medical Association in 1902, declared himself in favour of this hypothesis. Mr. F. G. JACKSON and Dr. VAUGHAN HARLEY[2] have brought forward experimental evidence in favour of the toxin theory. They demonstrated that tainted meat could produce scorbutic symptoms in monkeys even when plenty of fresh vegetables were given at the same time. Against this evidence, however, it is urged that a tainted diet is by no means a common antecedent in human scurvy. Dr. O. EICHHOLZ[3] in commenting on the discussion to which we have referred expressed himself as opposed to the idea that scurvy is due to the consumption of decomposing food and urged in support of his contention that overheating and desiccation of food favour the onset of the disease, whereas such processes are hardly likely to bring about putrefaction. He therefore maintains that scurvy originates in an inadequate supply of fresh food both as regards quantity and quality and that it is immaterial whether the nutriment is of animal or vegetable source.

It is evident that opinions as to the etiology of scurvy are by no means unanimous. The general disposition is to regard the disease as due to the absence of certain elements in the food which is taken, but the exact nature of those elements has not been conclusively demonstrated. Further, it seems probable that a diet of perfectly fresh animal food will supply the deficiencies and will check the spread of the disease. In support of these statements we may quote an interesting account given by Dr. AIKIN in the Memoirs of the Literary and Philosophical Society of Manchester, vol. i., 1785, p. 97. In 1743 a Russian ship was cast away in Spitzbergen and four sailors were accidentally left on the island. They ate three kinds of animals—reindeer, white bears, and foxes. The flesh was partaken of in an almost raw state and without salt and instead of bread other flesh dried hard in smoke was used. "Their preservatives against the scurvy were swallowing frozen meat broken into bits, drinking the warm blood of reindeer just killed, eating scurvy grass when they could meet with it, and using much exercise." Three of the four sailors remained free from scurvy throughout the six years and three months during which they were on the island. The fourth suffered from the disease and died from it in the sixth year. It is remarked that he "was of an indolent disposition and could not conquer his aversion to drinking the reindeer blood." Dr. AIKIN believed that reindeer blood derived its antiscorbutic qualities from the vegetable food of the animal. As we have before mentioned, the view that fresh vegetable food is essential in order to prevent an outbreak of scurvy has been held to be correct for many years. In face of the evidence which has been more recently brought forward, however, it is obvious that considerable modifications of that theory will be necessary and that in future expeditions a continuous supply of fresh animal food will be found to be absolutely necessary in order to prevent the occurrence of the disease.

[1] THE LANCET, March 5th, 1904, p. 657.
[2] THE LANCET, April 28th, 1900, p. 1184.
[3] Brit. Med. Jour., Oct. 25th, 1902, p. 1373.

A Question of Ethics.

A FEELING of unrest appears to pervade the deliberations of the dispensing world, a feeling which recognises the hardness of the lot of those who are harassed by competition and by so-called cutting rates. Companies and stores provide medicines at prices that are impossible or unsatisfactory to the retail dispenser and trade seems, therefore, to be flowing into new channels, leaving the old to bemoan their loss or to seek new sources of profit. Necessarily these conditions cause much uneasiness and this has been reflected in many meetings and in much correspondence. Suggestions for improvement have been made by the leaders of pharmacy who have even striven to give consolation by indicating the profits to be derived from the sale of photographic requirements. The dispensing druggist, while freely adopting the suggestion, rightly feels that his training has fitted him for higher work and turns again and again to the hope of retrieving the position which has been lost. The arguments which are adduced to explain the present state of affairs vary with the speaker and his particular sphere of work. Sometimes the stores and the companies are blamed, sometimes the prevalent taste for the use of patent medicines is held responsible, and often we are brought back to the old grumble about the dispensing of medicines by medical men. Companies and stores must always have a qualified dispensing druggist on the premises to act as "cover" for those under him. He is held responsible for the misdeeds of the unqualified should any errors be made; but at least this principle affords employment to certain individuals who are content to take the risk. From many points of view the method is far from satisfactory, but it has legal support and it is doubtful whether it can ever be altered. With

regard to the use of patent medicines and proprietary articles it does not appear to be certain whether the dispensing druggist is really blameless. No doubt the tendency is largely fostered and developed by bold advertisement but the tempting display of these articles upon the druggists' counters hardly suggests that there is any reluctance in their sale. They are not hidden away and produced only in response to a demand, they are all there in their neat, attractive little bottles, so that all who come for other purposes may be tempted by their appearance. It might even be urged that the production of the P.J.F. (which for our readers we may explain means the *Pharmaceutical Journal Formulary*) scarcely argues an inherent objection to the sale of an article with the name of the maker and without any prescription from a medical man. Still, it is felt that "something is rotten in the state of Denmark," that something is lacking, and that something is the need of a larger number of prescriptions to dispense.

The latest contribution to the subject is the suggestion that an association of dispensing druggists should "approach the medical faculty to enable them to arrive at a right understanding of the medical ethics they should pursue in conducting their business." This proposal has been referred to a subcommittee to report on and perhaps may not be heard of again. The special interest lies in the arguments with which the proposal was introduced. It was urged that something should be done to check the abuse of "hospitals and charitable institutions giving principally medicine," and the writer supported his contention by figures which indicated that while the population had greatly increased the numbers obtaining relief in hospitals had shown still greater increase. It was argued that national prosperity had likewise increased; that in 1873 the gross income for each individual might be calculated at £18 10*s*., while in 1903 similar calculation would represent the gross income of each individual at £23 10*s*. Surely it is obvious that there is a fallacy connected with these figures. No man with either of these incomes could afford to pay medical fees and dispensing druggists' charges. These expenses can only be provided for by the unequal distribution of property, which must leave many proper recipients of the charitable relief of hospitals. The author of this proposal thinks to enlist the sympathies of those members of the medical profession who are affected by hospital abuse. He generously suggests that medical men should see poorer patients at certain hours at very low fees and that their prescriptions could be dispensed at prices which such patients could afford. He reaches a climax with the innocent statement that this course would relieve dispensing druggists of "the necessity of prescribing, except in very simple ailments and exceptional cases." This ingenuous admission is delicious. A give-and-take principle is proposed, with a little advantage on one side. The ethical question resolves itself into a kind of bargain which is still to leave the dispenser free to assume the responsibility of diagnosing "simple ailments" and of selecting "exceptional cases" to receive the benefit of his advice. We sympathise deeply with the discontent which by a process of fermentation amongst dispensing druggists has led to this effusion but while the writer is to be credited with good intentions and with candour we feel that he has much to learn of professional ethics.

Annotations.

"Ne quid nimis."

EPSOM COLLEGE.

WE print on page 1678 a letter from Sir Constantine Holman, the treasurer of Epsom College, appealing for funds in aid of the Royal medical foundation in connexion with the College. This states that the council has to collect a sum of about £6000 annually to give pensions of £30 a year to 50 aged medical men, or to the widows of those deceased, and to provide a free education, with board and clothing, for 50 sons of necessitous medical men. He observes that no one can doubt that the members of the medical profession are more exposed to risks than members of any other profession and in the case of those living in the tropics and at many other stations abroad these risks are increased. That the institution reaches all classes of the profession may be gathered from the fact that at present there are pensioners residing in Africa, Australia, and France. To maintain the present number of pensioners and foundation scholars is a great strain upon the funds of the charitable side of the work and we understand that the cause of the present financial difficulty is a sudden breakdown in the drainage of the college which was laid some 50 years ago, the result being that a large portion has had at once to be relaid at a very considerable cost. This outlay seriously threatens the ability of the council to continue the relief at present rendered and a simple way out of the difficulty would be to reduce the numbers of both pensioners and foundation scholars. In view, however, of the large number of candidates awaiting election the council is naturally loth to adopt this course and as it has managed with the loyal assistance of friends to maintain 50 of each class for many years past it is most anxious to continue to do this. One important matter which the treasurer is endeavouring to arrange is that governors abroad shall in future have the opportunity of voting at the annual election of pensioners and foundation scholars, a privilege which we are sure will be appreciated. As our readers are aware, the scheme of education at Epsom College is on the lines of a first-class public school; boys are received from all classes and are prepared for every department in life. The college is peculiarly well fitted to receive the sons of medical officers in the naval, military, and civil services. Since 1893 24 open scholarships have been gained at the Universities of Oxford and Cambridge; 80 boys have passed the matriculation examination of the University of London in division 1 (one in honours) and 60 have passed in division 2; 38 have passed the preliminary scientific examination for the degree of M.B. of the University of London, and 41 have passed a part of the examination; 88 higher certificates (with 23 distinctions) and 293 lower certificates of the Oxford and Cambridge schools examination board have been obtained; and 73 boys have obtained South Kensington certificates for drawing. It is hardly necessary to add that not the slightest difference is made between the ordinary paying scholars and the foundationers, the former receiving a first-class education at a most reasonable charge. The treasurer observes that whilst the great schools of England have their foundations in realised property the council is dependent upon the support of friends and well-wishers subscribing year by year to maintain this charity. We cannot shut our eyes to the fact that at the present time there is a universal shortness of money and that medical men generally are keenly feeling this, but this is a cogent reason for urging the council not to diminish the benevolent work at present carried out, and

those who do not already support the college will, we trust, respond to the appeal of the treasurer at the present crisis.

PRESCRIPTIONS FOR POISONS.

A RECENT inquest held by Dr. G. Danford Thomas once more furnished evidence of the serious risks incurred by patients who have been supplied with prescriptions for morphine or other dangerous drugs. In this case the prescription had been given 16 years ago for an ailment from which the patient recovered but from that time she had continued to inject morphine with a hypodermic syringe in spite of repeated warnings from her medical attendant. An attack of bronchitis supervening the patient succumbed from an overdose of morphine which had not apparently been taken with suicidal intent. A dispensing chemist stated that, pursuant to the prescription, he had supplied the deceased with the drug for three years and that he was bound to do so by law. The coroner remarked upon the dangers of the present system which affixed no time-limit to the prescription. He said that it had been suggested that a medical man giving a prescription to a patient should, in affixing the date, state that the particular poison should not be supplied again by the druggist after the lapse of a week and with the need of an amendment of the existing law and practice the jury concurred. The majority of cases of poisoning with opium or morphine may be broadly divided into two classes: in the first the poison has been taken by a medical practitioner or a druggist and no legislative measures can be taken to reduce the risks of this class; in the second and larger class the drugs have been obtained by the abuse of a prescription. Since dispensers maintain that they are powerless in this respect it would be well for the medical profession to come to some agreement upon the matter. All prescriptions are dated. Might not those containing poisons be treated like railway tickets which are only available for a limited period from the date of issue? There are obvious objections to indicating on a prescription to be handed to a patient that the drugs are dangerous to life.

NOVEMBER AT HOME AND ABROAD.

THE appended table affords a general view of the state of the weather experienced at several of the southern winter resorts during the past month, and for purposes of comparison similar data have been given for Paris and for London and a few other places in this country. In only one of the southern resorts was the temperature equal to that of an average November and that was Algiers, the farthest south. Everywhere else the weather, after the first fortnight, was cold for the time of year and in many localities also very unsettled. It will be seen by the lowest temperatures for the month that frost was experienced at Nice, Biarritz, Florence, and Rome, and that Naples only escaped by the narrow margin of two degrees. At Biarritz frost occurred on two separate occasions and at Nice and Florence on four. The severity of the weather at Florence can be judged by the fact that its lowest temperature reading (recorded on the 30th) was only one degree above the minimum in London and three degrees lower than that at Torquay. Next to Algiers, Lisbon had the highest mean temperature, and that was followed at a respectful distance by the Sicilian resort of Palermo, while the daily mean at Florence and the Nice observatory was lower than that at either Jersey or the Scilly Islands. The average of the daily maximum and minimum temperatures at Algiers was slightly higher than the corresponding values at Jersey during the months of July and August, while Naples had the average temperature of the same island during the early days of May. When the equability of the temperature is considered the best of the foreign localities were Naples and Algiers but in that respect they were both inferior to the Scilly Islands and Jersey. With regard to the rainfall Biarritz far outstripped all other places and, with Jersey, had the greatest number of days with rain. The driest spots in the south were Nice and Rome. Nice and the Riviera generally had a good deal of sunshine—doubtless more than any of the home stations—but the actual figures are unfortunately not available. Among the English places none compare with Torquay and Jersey, while the dullest spot was not London but Nottingham. Torquay was particularly bright for such a dismal month as November. During the cold and rough weather for the last fortnight it was the most sunny spot in the United Kingdom.

Temperature and Rainfall.

—	Highest temperature.	Lowest temperature.	Mean daily maximum.	Mean daily minimum.	Mean daily temperature.	Total rainfall.	Number of hours of sunshine.
Nice	63	30	56	42	49·0	0·87	—
Biarritz	64	28	57	44	50·5	7·64	—
Florence	64	25	54	40	47·0	1·90	—
Rome	67	30	58	43	50·5	1·59	—
Naples	66	34	57	46	51·5	3·32	—
Palermo	78	40	61	48	54·5	3·82	—
Algiers	79	45	70	58	64·0	2·38	—
Lisbon	73	41	63	50	56·5	4·57	—
Paris	60	25	47	34	40·5	0·44	—
London	60	24	48	36	42·0	1·47	31
Scilly Isles	59	37	53	46	49·5	2·38	65
Jersey	60	32	53	43	48·0	3·40	92
Torquay	60	28	52	41	46·5	1·55	97
Bath	58	21	49	35	42·0	1·86	56
Nottingham ...	60	13	47	33	40·0	0·87	26

THE DIAGNOSIS OF CEREBRAL SYPHILIS.

AMONG the symptoms dependent upon cerebral syphilis there are none that belong exclusively to that affection. It is rather by the history of the case, by its early stages and course, and by the grouping of symptoms that a probable diagnosis can be made. There is often an irregularity in the phenomena which shows that there must be more than one focus of disease and sometimes the symptoms have a peculiar ephemeral character with remissions and variations. In the *Boston Medical and Surgical Journal* of Nov. 3rd Dr. S. G. Webber calls attention to the more important diagnostic points and illustrates them by a series of cases personally investigated during the past few years. The symptoms of syphilis of the brain and spinal cord are, says Dr. Webber, manifold as seen in different patients. The first of the group of symptoms to be recognised is headache. This is the earliest in appearance and should give timely warning of danger to be avoided. Its characters are great severity of the pain which is almost uninterrupted or occasionally marked by remissions. In many instances the pain is most severe in the evening or at night. It may be local, bilateral, or diffuse, and is very like the headache of cerebral tumour, except that nausea, vomiting, and vertigo are absent. This headache is relieved by moderate doses of the alkaline iodides. Convulsions, sometimes closely resembling *petit* or *grand mal*, constitute the second group of symptoms. It is at times very difficult to determine the syphilitic origin of such attacks. "If they begin after early adult years, and especially if headache has preceded the convulsions for any length of time, syphilis should be suspected." One attack is described as follows in a patient who "suddenly

became dizzy, put his hands to his face, crying out, 'Oh, my head,' and then dropped unconscious, with spasms of the face and eyeballs, clenched teeth, and darkly flushed face." Partial monospasms are commoner, however, than such convulsions and their presence indicates irritation of limited cortical areas. Three such cases are recorded of the latter, all of which recovered under treatment with potassic and mercuric iodides. A third class of symptoms includes hemiplegia, or a gradually increasing hemiparesis beginning with attacks of unilateral weakness which come and go accompanied by paræsthesia of the affected parts and preceded by headache. Even in cases of syphilitic paralysis of the cranial nerves motor weakness of the limbs is commonly present. The oculo-motor nerves are the most frequently affected of the cranial nerves, the disturbances of their function being partial and irregular. The facial and hypoglossal nerves are less affected and the special senses of sight and hearing are generally normal. Headache or trigeminal neuralgia precedes or accompanies the oculo-motor disturbance. Aphasia may be present with spasm or paralysis of articulation and after other cerebral symptoms have subsided the difficulty of speech may remain. Three illustrative cases of this are recorded. The fourth class of symptoms comprises syphilitic myelitis which is less frequent than cerebral syphilis. "There are no special symptoms indicating syphilitic as distinct from other lesions of the spinal cord." The prognosis of spinal syphilis is less favourable than that of cranial syphilis. The pseudo-tabes of syphilis is curable and is not a true tabetic degeneration. A case is recorded of a woman who developed it with weakness of the legs, inability to walk, shooting pains in the limbs, and "girdle sensations." The knee-jerks were absent and there was ataxy of gait. She recovered under treatment with potassium iodide and mercury (her physician knew that she had had syphilis). In another case, that of a man aged 35 years, similar treatment produced only a partial arrest of symptoms; he died shortly afterwards with paraplegia (left-sided). The fifth and last group of symptoms includes a primary neuritis of the peripheral nerves, occasionally caused by syphilis, but possessing no special diagnostic features. "In the treatment of syphilis of the nervous system," concludes Dr. Webber, "it is necessary to act with vigour. In slight cases potassium iodide, ten to 15 grains, may be given in three doses daily to relieve the headache. This should be continued for some months after pain has ceased. When the symptoms become serious the dose should be increased to 20 or 25 grains, and together with this mercury should be administered by inunction, the latter process being adopted when it is desired to make a rapid impression." Iron and cod-liver oil are also recommended to be given to combat the anæmia which is usually present.

AUSTRALASIAN MEDICAL CONGRESS.

THE seventh session of the Australasian Medical Congress will be held in Adelaide from Sept. 4th to 9th, 1905, under the presidency of Professor E. C. Stirling, C.M.G., M.D. Cantab., F.R.C.S. Eng., F.R.S. Among the patrons of the Congress are the Governor-General of the Australian Commonwealth, the late Governor-General, the Governors of New South Wales, Victoria, Queensland, South Australia, Western Australia, and New Zealand, and the Administrator of British New Guinea and the Chief Justice and Lieutenant-Governor of South Australia. The vice-presidents number eight medical men, six of whom have been presidents of past Australian Congresses, while the two remaining are respectively the Director-General of the Army Medical Services of the Commonwealth, Melbourne, and the senior naval medical officer on the Australian station, Sydney. The Congress will be divided into seven sections—viz., (1) Medicine; (2) Surgery; (3) Gynæcology and Obstetrics; (4) Eye, Ear, and Throat; (5) Pathology, Anatomy, Physiology, and Pharmacology; (6) Public Health; and (7) State Medicine and Medical Ethics. The presidents of the sections are: (1) Dr. Daniel Colquhoun, Dunedin; (2) Dr. F. D. Bird, Melbourne; (3) Dr. W. S. Byrne, Brisbane; (4) Mr. A. J. Brady and Dr. W. Odillo Maher, both of Sydney; (5) Professor D. A. Welsh, Sydney; (6) Dr. W. G. Armstrong, Sydney; and (7) Dr. G. A. Syme, Melbourne. Each section has six vice-presidents and a medical secretary or secretaries, and there are also six State secretaries of the congress—all medical men. The executive committee is composed of 20 members, including the president, a vice-president, treasurer, general secretary, associate secretary, the eight secretaries of the sections, and seven others. The general secretary is Dr. B. Poulton, North-terrace, Adelaide, South Australia. It is announced that the railway departments of Australasia will issue concession tickets to members and their wives for the return journey at single rates on presentation of certificates from the State secretaries of Congress countersigned by the railway authorities, and also that it is anticipated that reductions in fares similar to those granted in previous years will be made by the Interstate Steamship Companies.

WHAT IS BRANDY?

IT is satisfactory to learn that proceedings taken against wine merchants, publicans, and others for selling under the name of brandy a spirit which is not entirely derived from grape wine in the pot-still continue to be successful. The conviction obtained in the great test case at Islington has led to the adoption by the trade of a label on the bottles of the so-called cheap brandies to the effect that the spirit cannot be guaranteed as being derived solely from grape juice. So far, therefore, good has been done, inasmuch as the public are at least made aware of the nature of the spirit which is supplied. Occasionally in the defence it is stated that the bottle by some oversight had escaped the labelling process. In a summons taken out at the instance of the Holborn borough council this week such was the excuse. The magistrate convicted in three instances and fines and costs were imposed. We are glad to find that these proceedings are commonly based on the definition that brandy is a spirit distilled from grape wine in the pot-still. We hold this to be the correct description of genuine brandy.

INFANTILE MORTALITY IN FRANCE.

WE learn from a recent number of the *Moniteur de la Flotte* that the French Minister for Marine Affairs has sent round a circular to the maritime prefects inviting them to give their personal support at the ports under their control to the institutions, briefly entitled "Consultations de Nourrissons," which are designed to afford aid to the newly born as well as advice to their parents and guardians. In order to favour the extension of institutions of this description, some of which are known as "Gouttes de Lait," M. Pelletan, after conferring with Dr. Ausset, one of the professors in the Faculty of Medicine at Lille, has charged that gentleman in conjunction with one of the permanent officials of the Marine Ministry to found a "consultation" in each of the five principal naval seaports. This decision is the outcome of a resolution passed by the Senate towards the close of last year in which the Minister of the Interior is directed to bring to the notice of all general councils Professor Pierre Budin's report addressed to the Academy of Medicine on infantile mortality. What is required, said Professor Budin, is the encouragement in every possible way of breast feeding, the giving of advice to mothers, the attentive superintendence and direction of

nurses, together with weekly or fortnightly weighing of infants, and watchfulness to insure their receiving good milk. In this way medical men can bring about the disappearance of the most fruitful cause of infantile mortality—namely, diarrhœa. "Consultations de Nourrissons" were first started in 1892, when Professor Budin opened one at the Charité Hospital. Since then they have spread all over France, first in the hospitals and next as annexes to the dispensaries. Private enterprise then took the matter up in Paris and finally the system took root in the departments. The results have been so satisfactory that according to the departmental inspector of Seine-et-Oise it may be affirmed with confidence that of all the measures for dealing with the dangers that menace early infancy which have hitherto been adopted these consultations are by far the most powerful. The field is truly enormous seeing that fully one-half of the disease which causes the mortality among young children is preventable. In a preface to Professor Budin's work "Le Nourrisson" M. Jonnart writes to the following effect. To create a "Consultation de Nourrissons" three things suffice: a weighing machine, a milk steriliser, and the devotion of a medical man. The premises usually contain three rooms: a waiting room, one for inspection and weighing, and a third for the distribution of milk. These rooms require warming in winter. The furniture should comprise a few benches or stools, a table for the balance, another for the medical man to write on, and one or two chairs. It is also desirable that a set of pigeonholes should be available for the classifying of documents having reference to weight and milk distribution, the latter being the sole source of expenditure in connexion with the institution. The medical man plays the capital rôle. It is to the devotion of the medical body that it seems suitable to have recourse for the protection of infant lives.

THE STUDY OF THE HISTORY OF MEDICINE.

IN a presidential address delivered before the Medical and Chirurgical Faculty of the State of Maryland on its 105th anniversary Dr. Eugene F. Cordell took for his subject the Importance of the Study of the History of Medicine. Rightly did he lament how meagre was the teaching of this subject in the medical departments of the universities of the States. He wrote for information to fourteen of these and the result of his inquiry was that he was enabled to state that in only three—namely, the Universities of Pennsylvania, Maryland, and Minnesota—was there a full course of lectures on the history of medicine. Johns Hopkins Hospital, however, has a historical club which does excellent work in furthering the study of medical history by assembling for the reading of papers. Harvard University attempted a course of lectures but "no interest was shown" and the course was abandoned. It may be some comfort to Dr. Cordell to know that in these islands the position so far as regards the teaching of the history of medicine is still worse, for so far as we know no university or teaching school of medicine deals with the subject in any way. The only course of lectures known to us is that recently founded by the widow of the late Dr. FitzPatrick at the Royal College of Physicians of London, two courses of which have been already delivered by Dr. J. F. Payne. Dr. Cordell proceeded in his address to show that a study of medical history taught us what and how to investigate; that it was an antidote for error, egotism, and despondency; that it increased knowledge, broadened the view and strengthened the judgment; that it was a mine from which many neglected or overlooked discoveries might be brought to light; and that it taught us to cherish our best traditions. With all this we thoroughly agree but the unhappy student in this country is at present so overloaded with subjects for his curriculum that we fear that it is but vain to expect another subject to be included. But a beginning might be made if those universities which demand a thesis from their graduates in medicine should all demand a historical retrospect of the subject, as indeed at least one of them does at present. Those which demand that the would-be graduate should pass an examination without a thesis might include a paper upon medical history which would at least insure that the student knew something of the past of his profession.

THE LECTURES AT THE ROYAL INSTITUTION.

THE preliminary programme of lectures to be delivered before Easter at the Royal Institution has just been issued. The Christmas course, which is always specially adapted to a juvenile audience, will be given by Mr. Henry Cunynghame who will take for his subject "Ancient and Modern Methods of Measuring Time." Among the other announcements are six lectures on Adaptation and History in the Structure and Life of Animals, by Professor L. C. Miall; three lectures on Some Recent Biometric Studies, by Professor Karl Pearson; two lectures on Synthetic Chemistry, by Professor R. Meldola; three lectures on Electrical Properties of Radioactive Substances, by Professor J. J. Thomson; and three lectures on Some Controverted Questions of Optics, by Lord Rayleigh. The Friday evening meetings will begin on Jan. 20th, when a discourse will be delivered by Sir James Dewar on New Low Temperature Phenomena.

PNEUMOCOCCIC ENDOCARDITIS.

IN the *American Journal of the Medical Sciences* for November Dr. H. B. Preble has published three cases of pneumococcic endocarditis and exhaustively reviewed the literature of the subject. His paper is opportune because no extensive review of the subject has been made since Netter's contribution in 1885, in which 82 cases were mentioned. 50 cases have subsequently been reported. The frequency with which pneumonia is complicated by endocarditis cannot be positively stated because in a certain proportion endocarditis is unrecognised and the patients later come under observation suffering from chronic heart disease. The percentages given by various writers vary from 0·06 (Aufrecht) to 16·0 (reported by Osler in 100 fatal cases of pneumonia). The percentage of pneumococcic cases in all forms of infectious endocarditis is 22. As to the valves affected, out of 141 cases (including in addition to the 132 clinical cases mentioned above nine in which only the valve affected and the relation to pneumonia are stated), the aortic valves were affected alone in 56; the mitral alone in 40; the aortic and mitral in 20; the tricuspid alone in 12; the pulmonary alone in five; the aortic, mitral, and tricuspid in five; the mitral and tricuspid in two; and the aortic and tricuspid in one. It has been said that infarcts are exceptional, but in 20 of the 50 cases added to those of Netter infarcts were found in the spleen, the kidney, the lungs, the brain, or the intestine. Endocarditis complicating pneumonia is frequently associated with meningitis. Netter found this association in no less than 45 cases out of 63. Meningitis is a much commoner complication of pneumonia than is endocarditis. The influence of antecedent endocarditis as a predisposing cause of pneumococcic endocarditis is considerable. Old endocarditis upon which recent vegetations had been found was seen in 12 out of the 50 cases. Other predisposing causes are alcoholism, anæmia, debility, and malnutrition. Clinically the cases may be divided into two groups—those which are latent—i.e., in which there are no symptoms indicating endocarditis—and those in which the diagnosis is possible. The first group is the larger. In pneumonia frequent examinations of the heart should be made to detect a murmur. But, as in other fevers, systolic murmurs

may occur without endocarditis. Diastolic murmurs, on the other hand, indicate endocarditis. The symptoms of pneumococcic endocarditis do not differ from those of other forms of endocarditis. There usually is pyrexia; in rare instances it is absent. Lesage and Pineau have reported a case of three months' duration without any rise of temperature. Generally the temperature is very irregular, being interrupted by chills, and rising frequently to 104° or 105° F. But sometimes there is continuous or regularly remittent fever. The pyrexia of the pneumonia may pass into that of the endocarditis, but often there is an interval of a few days in which there is apyrexia. In 20 cases this interval varied from a portion of a day to 12 days. The duration of the pyrexia varies from a few days to months. In 109 cases the total duration of the illness (it was impossible to fix the onset of the endocarditis) ranged from seven to 180 days and averaged 30 days. The pulse-rate may correspond to the temperature or be more rapid or there may be bradycardia. Subjective symptoms referable to the heart are the exception and are nearly always the result of an old lesion. Physical signs are absent in many of the cases. In a certain proportion pericarditis develops. Changes in the area of cardiac dulness are found only in a small proportion of the cases. Arthritis is a frequent complication. The number of cases in which pneumococci have been found in the blood is only nine but they have not been searched for sufficiently frequently. Pneumococcic endocarditis may occur without pneumonia; then the diagnosis can be made only by finding pneumococci in the blood. The gravity of the prognosis is shown by the fact that recovery took place only in four out of the 132 cases. The treatment should be conducted on general principles. The following is one of the cases reported by Dr. Preble. A man, aged 35 years, was admitted into hospital on the fourth day of an attack of pneumonia of the right lower lobe. There was alcoholic delirium. The temperature was 100·6°, the pulse was 120, and the respiration was 40. The leucocytes were 10,000. Examination of the heart was negative. On the ninth day the temperature was normal and the patient apparently was convalescing. On the thirteenth day there was a severe chill and the temperature rose to 103·2°; physical examination was negative. On the sixteenth day a systolic murmur was heard at the apex. The temperature ran an irregular course, often reaching 104° to 105°, and was interrupted by chills. The number of leucocytes fell to 6750, and though the blood was repeatedly examined for pneumococci none were found until the thirty-second day. During the night of the thirty-first day a petechial eruption appeared. Death occurred on the forty-second day. The murmur persisted until death. At the necropsy the lungs were found to be almost normal, the affected lobe being only a little firmer than the others. The heart was of normal size but showed three or four small sub-pericardial hæmorrhages. On the mitral valve was a polypoid, dirty greenish, irregularly granular, firm vegetation of the size of a hazel nut. Along the line of closure of the leaflets were vegetations of the size of a pinhead. In the spleen and kidneys were infarcts. Smears from the vegetations showed pneumococci in large numbers.

DR. ARBUTHNOT AND DEAN SWIFT.

THE mysterious fits of giddiness that puzzled and tortured Dean Swift until the final darkness of insanity settled upon him are now almost proved to have been due to labyrinthine vertigo, a disease discovered by Ménière after experiments upon animals. The famous Dr. Arbuthnot made light of these attacks which shattered Swift's strength for days. "Pope and I," he writes in 1730, "have had the distemper these 30 years. I have found that steel, the warm gums, and the bark, all do good in it." Arbuthnot's tremendous prescriptions in Swift's case are as follows: "*A.* ℞ pulv. rad. ipecacoanae, ℈j. *B.* ℞ conserv. flavedin. aurant. absynth. Rom. ana ℥ vj, rubigin. martis in pollin. redact. ℥ iij. syrup. e succo kermes, q. s. *C.* ℞ as fœtid. ℥ ij. tinctur. castor. q. s. M. fiant pilulæ xxiv. *D.* ℞ cortic. peruviani elect. rubign. martis ana. ℥ j. digere tepide in vini albi Gallic. lb ij per 24 horas: postea fiat colatura. *E.* ℞ sp. cor. cerv. sp. lavendul. tinctur. castor. ana ℥ ij. misce." "Take the first vomit *A*;" says the good physician; "then, every day, the quantity of a nutmeg, in the morning, of the electuary, marked *B*; with five spoonfuls of the tincture marked *D*. Take the tincture, but not the electuary in the afternoon. You may take one of the pills marked *C*, at any time when you are troubled with it; or 30 of the drops marked *E*, in any vehicle, even water. I had a servant of my own that was cured merely with vomiting." Both Swift and Pope placed the utmost reliance in Arbuthnot and often expressed their gratitude to him, the latter poet once in well-known lines. It is noteworthy that Arbuthnot when prescribing for Swift only thought to cure headache.

CHRONIC INTUSSUSCEPTION SIMULATING DYSENTERY.

IN the *Journal of the Royal Army Medical Corps* for November Captain K. Bruce Barnett, R.A.M.C., has published a rare and remarkable case in which chronic intussusception simulated dysentery. A soldier, aged 24 years, was admitted into hospital for varicose veins of the legs but refused operation. He complained of passing blood per rectum. He suffered from chronic constipation and was in the habit of using purgatives. For some months he had been passing blood but it troubled him so little that he did not seek advice. His "medical history sheet" showed that he was 35 days in hospital in South Africa for dysentery which was treated with salines. In the last year he was in hospital for 47 days and was treated for "ulceration of the rectum." On rectal examination Captain Barnett found nothing abnormal. The stools were offensive, fluid or semi-fluid, and usually contained clots and fluid blood. Occasionally there was no blood in the stools passed first in the morning but the subsequent ones were almost pure blood. The number passed in the 24 hours varied from one to six or eight. At no time was a solid motion passed. The urine was normal. The tongue was clean and the temperature was normal. The abdomen was rather empty and retracted and palpation revealed nothing. At times there was a little abdominal pain which varied in position. Tenesmus immediately before passing a stool was sometimes present. The patient was carefully dieted on peptonised milk, strained soups, and beef juice, and was given from ten to 20 grains of pulvis ipecacuanhæ four times daily combined with a little extract of belladonna, 15 minims of tincture of opium being administered a short time before taking each dose according to the usual Indian method of treating dysentery. The bowels were also acted upon by small doses of calomel, castor oil, sulphate of magnesium, and other drugs, which always gave relief. When the blood passed seemed excessive an astringent mixture containing turpentine, hamamelis, and gallic acid was given. As this treatment was not successful the lower bowel was frequently washed out with hot boric solution, after which injections of from one to two pints of a solution of nitrate of silver (half a grain to the ounce) were given with tube and funnel twice daily. For a time the patient appeared to improve under this treatment. He was troubled with sickness and retching which were attributed to the ipecacuanha. The stools became less numerous and less offensive and contained more fæcal matter and less blood. He slept better but appeared to be losing flesh. On

June 17th, when he had been about two months under treatment, he became much worse, vomited frequently, and had severe abdominal pain; seven small dark, and very often offensive, stools were passed. On the 18th there was no action of the bowels, no fæces or flatus being passed; vomiting was more frequent and was accompanied by severe epigastric pain. The abdomen was flaccid and retracted and palpation did not reveal any tumour. On the 19th the symptoms of acute obstruction became more marked; no fluid could be kept on the stomach and there were hiccough and great restlessness. The temperature fell to 97° F. A large fluid tarry stool consisting of pure blood was passed and blood was vomited several times. The face was pinched, the skin was cold and clammy, and the pulse was rapid and weak. Death took place on the following day. At the necropsy the stomach and intestines were found to be slightly congested but otherwise normal to within ten inches of the ileo-cæcal valve. From this point to the valve was a dark-blue intussusception of the ileum. The layers of the invaginated portion were agglutinated. The large intestine was congested and filled with tarry offensive fluid but was nowhere ulcerated.

THE SIMPLIFICATION OF ENTRANCE TO THE MEDICAL AND OTHER PROFESSIONS.

IT is a fact familiar to all who have entered professions, and more painfully, perhaps, to those who have desired to place sons in them, that there is a multiplicity of examinations which qualify for entrance. Many bodies hold examinations of this kind which, although identical in standard, are yet altogether diverse in the details of their requirements. The effects of this diversity are serious not only to schools by rendering it impossible for boys working for the different examinations to be taught together, but also to the education of the boys preparing for the examinations by depriving them of the regular class instruction during their preparation. It would be a great gain if there were a recognised standard examination the exact requirements for which could be taught in schools all over the country and the successful passing of which would qualify a boy in the eyes of such bodies as the General Medical Council, the Institution of Civil Engineers, and so on, to enter upon the particular studies required by the examining bodies for the professions of medicine, engineering, and so on. A scheme to meet this want has been proposed to the Board of Education by its Consultative Committee and we may be sure that so far as the medical profession is concerned the advantage of this scheme for "school certificates" will be fully recognised and any help possible will be given towards furthering a practical realisation of the steps recommended. In fact, the Board of Education has been largely influenced in the matter by a letter from the General Medical Council which was forwarded to the Board with a memorial sent by the headmasters' conference. This memorial was also sent to such bodies as the Pharmaceutical Society and the Royal Institute of British Architects, and the Institute of Actuaries. The Consultative Committee states that in its opinion a general system of school certificates is desirable and that it is not desirable that examinations for such certificates should be conducted by means of papers set for the whole country from a central organisation. The examinations should be controlled by a university, a combination of universities, or an examining board representative of a university or universities and of the local bodies prepared to coöperate with them. The committee further proposes means for preserving uniformity of standard and for the conduct and method of examination. Further passages in its report deal with the nature of the certificates and with special provisions for schools which in the opinion of the Board of Education are unable to conform to the regulations. Altogether the scheme seems to us well thought out and quite practicable and we trust that at no far distant date its provisions will be realised.

LANCASHIRE AND CHESHIRE SOCIETY FOR THE CARE OF THE FEEBLE-MINDED.

THE work of the past year has been very active at the various homes of the Lancashire and Cheshire Society for the Care of the Feeble-minded owing to all the homes being generally full. These homes comprise boys' and girls' schools at Sandlebridge for about 50 resident patients, a new boarding school now being built to accommodate another 50 children, and smaller branch institutions recently founded at Southport and Eccles. Various ladies and gentlemen give their services gratuitously to this excellent institution—the school at Sandlebridge and its accessory branches. Dr. Henry Ashby gives his services and advice as visiting physician, Dr. E. E. N. Surridge is the resident physician in charge of the institution, Dr. J. Gray Clegg acts as ophthalmic surgeon, and Mr. Wooley of Manchester provides free of cost all the drugs needed in the schools. In this way, through the charitable help and efforts of many, the schools under the Lancashire and Cheshire Society for the Care of the Feeble-minded are doing good work. Among the simpler trades and handicrafts taught to the pupils are basket-making and carpentry. The last is a new occupation rendered possible through the kindness of Sir W. Mather who has given the necessary benches, tools, and equipment, and of Mr. Teare, a practical instructor in woodwork and carpentry, who gives his services gratuitously to the boys on Saturdays. The report of the boys' home for the year is very satisfactory. "Gentle, skilful management keeps all our boys happy and orderly as we could wish," says the report. They constantly become more useful and thoroughly enjoy work in the house and garden. They are occupied according to the season of the year under the head gardener and can now be trusted to do much more than at first. Digging out potatoes, weeding, gathering fruit and vegetables, and poultry farming give occupation to several. Indoors they help with all the household work. The girls' home has 24 in residence and they have likewise passed a very satisfactory year of education and training in farm and garden as well as domestic work. The little farm colony, in fact, not only provides for all the wants of the children and staff in the way of vegetables and farm produce but has during the year made a money return of over £100. "Our fruit trees are beginning to yield, we have been able to make jam for ourselves, and hope by careful attention to make the land more remunerative each year." Dr. Surridge states in his report that the health of the children has been remarkably good during the year. One little girl had appendicitis but recovered after operation. Toys and gifts of clothing for Christmas would be warmly appreciated. The addresses of the honorary secretaries are Miss Mary Dendy, 13, Clarence-road, Withington, and Dr. Joshua J. Cox, Deansgate, Manchester.

FRACTURE OF THE FEMUR IN A SUBJECT OF HÆMOPHILIA.

IN the *British Journal of Children's Diseases* for November Mr. Keith W. Monsarrat has published a case of fracture of the femur in a subject of hæmophilia which is important in consequence of the absence of mention of the condition in the text-books and its liability to be misunderstood. A boy, aged eight years, was admitted to hospital on Feb. 11th, 1904, soon after he had been knocked down in the street. There was a fracture in

the middle of the shaft of the left femur, oblique from behind forwards (as shown by radioscopy), and with an inch of shortening. Under anæsthesia the fracture was reduced. A Liston's splint and short local splints were applied. During the next few days there was much swelling at the site of the fracture and the boy complained of pain which kept him awake at night. On the 18th the swelling seemed to be still increasing; the splints were changed, extension tapes were applied, the local splints were retained, and the limb was elevated to a right angle by means of an apparatus fixed to scaffolding over the bed. On the 21st it was noted that there was no improvement and that the temperature had been steadily rising and had reached 102° F. At this time the swelling was found to be fluid. This, taken in conjunction with the pyrexia and great pain and tenderness, led to the view that there was a secondary inflammatory process. The pulse was 140 and a discolouration, which appeared to be a bruise, was noticed over the radial artery. On further examination bruises were found on different parts of the body. Then the following history was obtained. The boy had diphtheria at the age of eight months which was accompanied by hæmorrhage from the nose and mouth. Subsequently it was noticed that he bruised very easily. A short time before the accident a tooth was extracted and he bled for a week in spite of firm plugging. In the last two or three years one or other knee was frequently swollen. He would go to bed quite well and awake with swelling in one or other joint. There was no family history of hæmophilia. During the remainder of the boy's stay in hospital the diagnosis of hæmophilia was fully confirmed; bruises appeared wherever the splints pressed. On April 28th all the signs of a hæmophilic joint developed in the left knee. Union of the fracture was not delayed; at the end of four weeks it was firm and there was no shortening. At the time of the report the boy was under treatment for a recurrence of the effusion in the left knee. The important points in the case are: (1) the enormous effusion of blood around the fracture and its association with symptoms suggesting inflammatory effusion, and (2) the fact that union took place satisfactorily and early. Mr. Monsarrat regards the pyrexia as an exaggeration of the traumatic fever which occurs in most cases of simple fracture.

THE medical officer of the Cape Colony states that for the week ending Nov. 12th the state of plague in the colony was as follows. Only 1 case was discovered during the week at Port Elizabeth but plague-infected rodents were found. Plague-infected rodents were also found at East London but elsewhere in the colony no plague in man or animals was found. As regards the Mauritius, a telegram from the Governor received at the Colonial Office on Dec. 2nd states that for the week ending Dec. 1st there were 32 cases of plague and 25 deaths from the disease, of which 2 were of white persons.

OUR Paris correspondent informed our readers last week that a committee had just been constituted in Paris to make preparations for a visit of British physicians and surgeons next year in return for that recently paid by their French colleagues to London and that Professor Bouchard had been nominated as its President. M. Lucas-Championnière has since been elected as Vice-President and Dr. Sillonville of Aix-les-Bains and Dr. Triboulet of Paris have been appointed as secretaries of the committee.

A SPECIAL meeting of the Society for the Study of Disease in Children will be held at 5.30 P.M. on Friday, Dec. 16th, at 11, Chandos-street, London, W., for the purpose of discussing Sudden and Unexpected Death in Children. The discussion will be introduced by Dr. C. J. Macalister, Dr. J. Porter Parkinson, Mr. J. W. Thomson Walker, Mr. A. H. Tubby, and Dr. J. Blumfeld. The meeting is open to all members of the medical profession.

Dr. F. Dittmar, medical officer of health of Scarborough, has been appointed to the office of medical inspector, Local Government Board of Scotland, vacant by the promotion of Dr. W. Leslie Mackenzie to be a medical member of the Board.

THE EVOLUTION OF MAN'S DIET.

BY HARRY CAMPBELL, M.D., F.R.C.P. LOND.,
PHYSICIAN TO THE NORTH-WEST LONDON HOSPITAL AND TO THE HOSPITAL FOR NERVOUS DISEASES, WELBECK-STREET.

IX.[1]

THE PRE-CIBICULTURAL COCTURAL PERIOD (*concluded*).

Salt.—To what extent the pre-cibiculturists consume salt I am unable to say but it is certain that some of them display a craving for it. Clifford who came upon a camp of Malay negritoes describes how after partaking of their meal he produced a bag of coarse Chinese rock salt, and how eagerly they vied with one another to obtain a portion of it. That salt is not unknown to the Californians is suggested by the statement regarding one of their tribes that they "use very little salt or none at all." The Australians show their liking for salt by consuming large quantities of the highly saline plants in which their country abounds. Here reference may be made to a practice among the Andamanese of mixing pure wood ash with certain fruits in order to cover their acidity.

DRINKS.

Water.—The drink of the pre-cibiculturists consists of water obtained from pool, lake, spring, or stream. They do not appear to dig wells, partly, no doubt, because this would, with their primitive equipment, entail great labour, but chiefly because they but seldom remain for any length of time in one place, but wander about selecting a spot for encampment where water can readily be procured. In some parts of Australia where this precious element is scarce the native is sometimes able to slake his thirst by piercing the bark of certain succulent trees and tapping them of their watery sap.

Inasmuch as the pre-cibiculturists are continually on the move and seldom congregate in large numbers, the water they drink is probably but seldom seriously tainted with sewage, and they consequently seldom, if ever, suffer from such water-borne diseases as enteric fever and cholera.

Pre-cibicultural man generally drinks by bending down to the water's edge after the manner of cattle (see Fig. 8), in this resembling the anthropoid apes; or he may use his hands as a cup, a method never adopted by the apes, though they sometimes adopt the expedient of immersing a hand in the water and then licking off the liquid. Primitive man occasionally employs shells and other natural objects for drinking purposes, but, as already observed, he is under a great disadvantage in the matter of water-tight utensils, a fact which helps to explain his backwardness in many of the arts and manufactures. Wooden bowls and bark vessels are in use among some of the pre-cibiculturists—e.g., the Australians, and bamboo canes among others—e.g., the Malay negritoes; stone vessels are employed by the Esquimaux and Californians, but, owing to the difficulty in finding suitable stone and the time occupied in working it when found, are not in wide use as water receptacles. For this purpose the pre-cibiculturists rely chiefly upon the skins of animals and closely plaited grasses, by means of which the Californians make bottles of marvellous workmanship. Of the various kinds of skin water bag in use among the pre-cibiculturists mention may be made of those which the Australians fashion out of opossum skins: an incision is made round the neck of the animal, which is then skinned from the head downwards, the integument coming off without any further cutting save at the feet; when all the openings except that in the

[1] Nos. I., II., III., IV., V., VI., VII. and VIII. were published in THE LANCET of Sept. 10th (p. 731), 17th (p. 849), 24th (p. 909), Oct. 1st (p. 967), 15th (p. 1097), 29th (p. 1234), Nov. 12th (p. 1368), and 19th (p. 1519), respectively.

cervical region have been tied up the bag—with the fur inside—is ready for use.

Quantity of water drunk.—I have no information as to the amount of water the pre-cibiculturists consume, nor any precise knowledge as to the times at which they take it, except that certain Californian tribes are said not to drink with their meals.

Therapeutic uses of water.—The pre-cibiculturists are not wholly ignorant of the therapeutic uses of water. The Australians imbibe large quantities for the cure of dyspepsia and sometimes prescribe the cold bath; the Fuegians when ill drink freely of it in order to promote perspiration, while the Northern Californians employ it for the cure of a variety of maladies in the primitive form of Turkish bath, or *temescal*, as the Franciscan fathers designated it. The bath consists of a hole, dug generally by the side of a stream, and roofed over so as to make it almost airtight, entrance and exit being made by a small hatchway, which is instantly closed upon entering or leaving the chamber. In the early autumn a fire is built in the centre and kept alive till the following spring; the bathers squat inside where they remain in spite of the close, smoke-laden atmosphere, until they break out into a profuse perspiration, when they quit the chamber and plunge into the stream hard by. The Central Californians also employ another method of promoting perspiration: a hole is dug in the sand large enough to contain the patient; over this a fire is kept burning until the sand is thoroughly heated when the fire is removed, then the patient is laid in the hole and his body and limbs are covered with sand; thus he remains until free sweating is induced, when he is immersed in cold water.

Artificial drinks.—Although the drink of the pre-cibiculturists is mainly confined to water they do occasionally make artificial drinks. The Australians prepare a drink by dissolving "manna" and gum acacia in water, manna being a sweet substance which exudes from the leaves of certain gum trees, doubtless of the same nature as that which may be seen during the summer months upon the leaves of many of our own trees, notably limes. The Californians soak crushed manzanita berries in water and imbibe the liquor by means of "the shaggy knob of a deer's tail" which evidently does duty for a spoon. Doubtless many other vegetable drinks are made by the pre-cibiculturists, but I have not come across any reference to them.

Blood and fat may also be reckoned among the drinks of the pre-cibiculturists; the bushmen drink the liquid fat of the hippopotamus; Barrow saw a party of them preparing a disgusting mixture as follows: "Having cut the throat of the sheep they opened the belly to let the blood run among the entrails; then cutting these with a knife and pouring in a quantity of water they stirred up all together and drank the nauseous mixture with an appetite that sufficiently showed it to be suitable to their taste."

Ignorance of alcohol.—The pre-cibiculturists are ignorant of the art of making alcohol, a fact which, like their inability to extract sugar and starch from vegetable substances, is probably to be explained by their lack of convenient vessels for holding liquids, especially such as are capable of resisting fire. Certainly we cannot, having regard to the skill they display in the preparation of their vegetable food, explain their backwardness in this respect by any want of ingenuity on their part.

Man did not learn to make alcohol until he had entered upon the agricultural stage. Hence, viewed from the standpoint of evolution its discovery is of comparatively recent date, and it is evident that man had come well within the reach of the highest rung of his long evolutionary ladder before he had felt the subtle stimulus of that most potent fluid. Since its first discovery it has led to a vast amount of disease and death, and there has thus been a steady elimination both of those most susceptible to its toxic effects and still more of those most responsive to its seductive charms: thus there is evolving a type capable of resisting alike its lethal influence and the temptation to imbibe inordinately. It is strange that this so obvious conclusion, which has again and again been insisted upon by Dr. Archdall Reid, has not received general acceptance, the more so that his *a priori* contention is confirmed by an appeal to facts, for, as Dr. Reid has shown, those peoples who have had longest acquaintance with alcohol are just those who are the most temperate.

Instinctive liking for stimulating substances.—In spite of their ignorance of alcohol the pre-cibiculturists manifest, in common with all the higher animals, a liking for things stimulating. This is shown in their habit of chewing stimulating substances. The Australian custom of chewing "pitcheree" is an instance in point; so highly do they value this substance that they travel long distances to obtain the twigs of the plant from which to make it; these are munched into a mass which is mixed with the ash of the gum tree, a method not unlike that employed in the manufacture of the well-known betel so extensively used by the island populations of the East. Besides pitcheree the Australians chew the dried leaves of the murradutta which are said to contain an intoxicating principle; also, in common with the Philippine negritoes, gum, apparently in the belief, contrary to what physiologists now teach, that it is a food. Be this as it may, there can be little doubt that the popularity of gum chewing not only among these primitive folk, but among more advanced peoples, is to be explained by the stimulation which the mere mechanical action of the masticatory muscles is known to produce. Certain Californian tribes chew the twigs of the "rabbit bush."

GENERAL OBSERVATIONS.

Pre-cibicultural man essentially a wanderer.—We have seen that the anthropoid apes—e.g., the orang and chimpansee—wander about their forests in search of food, visiting places where a particular fruit or seed grows at the season of its maturity. This wandering habit is to be observed in a marked degree among primitive men who are kept continually on the move in their search for food, both vegetable and animal, travelling—as do, e.g., the Australians—long distances to obtain bunya seeds, gum, the wood for their pitcheree, or what not, and tracking game from place to place. Though the direction of their wanderings is probably determined chiefly by the search for vegetable food, such animals as they happen to come across being hunted by the way, yet, like all carnivorous animals, they follow their prey about from place to place, this being an additional, and in some cases the main, cause of their nomadism: if they remained in the same place they would very soon frighten off the game. The search for fish may also lead to wandering, for we read that many of the inland Californian tribes come down at the fishing season to the coast and remain there until the shoals leave. Now seeing that man has during a long period of his evolutionary career led a nomad life, we may take it that he is largely adapted to this kind of existence; and this may help to explain, in part at least, the great benefit which the comparatively stationary modern often derives from "change of air": the race is not yet fully adapted to a stationary mode of life.

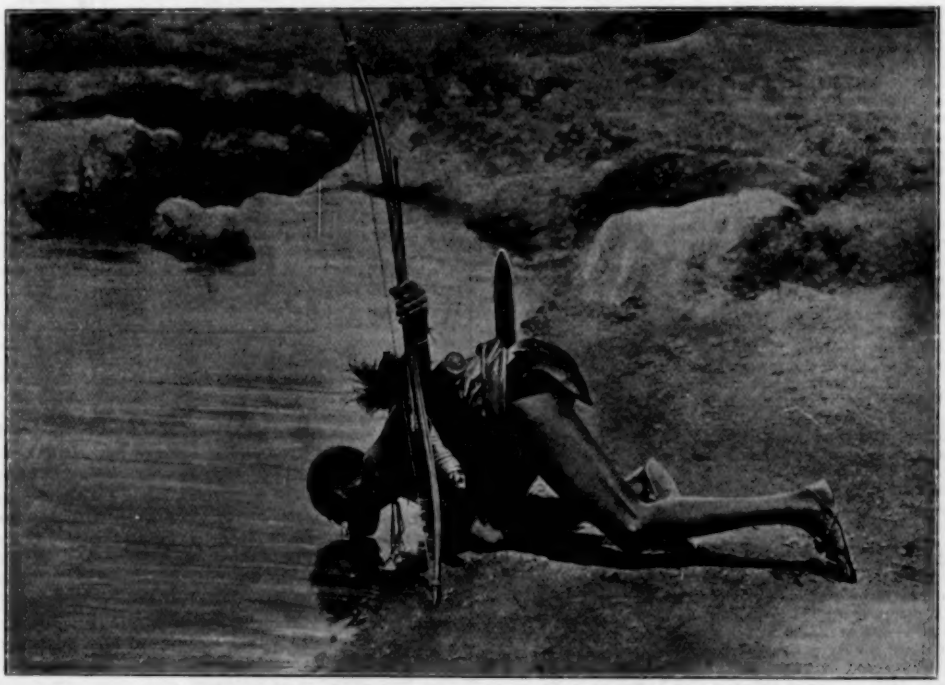
The relative quantity of animal and vegetable food.—Taking the present-day pre-cibiculturists as a guide, we shall probably not be far wrong in concluding that for this stage of development man's dietary was about half animal and half vegetable. Some pre-cibiculturists, such as the Esquimaux and the Fuegians, are almost entirely animal feeders; but these are peoples who are altogether peculiarly situated. According to Colonel Man, who spent many years among the Andamanese, the food of these people is two-thirds animal, the remaining third consisting of vegetable food and honey. The Tasmanians are said to have lived mainly by the chase. Some of the Australian tribes subsist chiefly on animal, others chiefly on vegetable, food. With the Californians vegetable food probably preponderates—one of their tribes inhabiting a region of oak forests is four-fifths vegetarian—but they are degenerates who have to a large extent abandoned the chase, the descendants in all probability of a hardier race of hunters.

Quantity of food eaten.—Pre-cibicultural peoples are given, as many independent travellers testify, to gorge themselves at times with enormous quantities of food, and though some of the stories to this effect are doubtless exaggerated many of them are certainly true. A Californian is said to be able to eat 24 pounds of meat right off, and there is on record the case of a native who disposed of 17 water-melons at a sitting. The Esquimaux are said to eat "till they cannot move." Two of them can dispose of a seal. Captain Hall says: "No human stomach but an Esquimaux's could possibly hold what I saw these men and women devour." One man who had for a long time been on short rations swallowed, without apparent discomfort, enough frozen seal "to have killed six white men" and followed this up by drinking two pints of water. A. H. Keane gives an instance of five Bushmen devouring a whole zebra in a couple of hours, and Farini relates how two of them consumed an entire hyæna, never ceasing until "they had placed themselves outside the whole

carcass." A Tasmanian child, eight months old, still at the mother's breast, "ate a whole kangaroo rat and then attacked a crawfish." Sawyer states that the stomach of the Philippine negritoes is habitually distended from devouring large quantities of innutritious vegetable food.

The capacity to consume such enormous quantities of food is possibly related to the fact that pre-cibicultural man is not infrequently compelled through dearth of food to subsist on a small quantity for a long period, or even to go for days without any at all, so that it is of advantage to him to be able to lay in a food store when opportunity offers. With this capacity goes the further capacity to withstand starvation. The pre-cibiculturist can bear fatigue without food much better than can the cibiculturists. Herbert Spencer, after remarking on the large quantity of food the Bushmen can consume and on their exceptionally capacious alimentary tract, alludes to their power of enduring fatigue without food for days together, a fact which Hillier associates with the abundant accumulation of fat found in these people, who very limited. It has been calculated that each member of a pre-cibicultural community requires many square miles to himself. The primitive Australian, for instance, needs 50 square miles for his share, whereas cibicultural England has a population of some 541 per square mile! But though no part of the world is capable of affording food for more than a very scanty pre-cibicultural population, it does not follow that the supply per individual of that population is meagre. The number of inhabitants may be so regulated that each one shall have an abundant share, and there is, indeed, evidence that the individual pre-cibiculturist has, during certain seasons at least, fully sufficient food at his disposal. According to Colonel Man the Andamanese "find ample provision for their simple wants in their immediate surroundings"; the Californians, too, are said to be able to procure a sufficiency of food with little work, their rivers being sometimes "black with salmon," while their country affords an abundance of valuable vegetable foods, such as acorns and manzanita berries. Sir George Grey also insists

FIG. 8.



Native drinking at pool. (After Sir Harry Johnston.)

share the peculiarity with the camel, dromedary and South African sheep, all of which are by this circumstance adapted to meet the exigencies of a life spent in desert regions. The Esquimaux are also said to be able to go a long time without food.

Available supply of food.—The question as to the quantity of food available for pre-cibicultural man is of great interest. Are we to conclude that nature has provided him with an ample supply which can be procured with very little trouble, or that the supply is scanty and only to be obtained by wearisome search? It has to be remembered in this connexion that the surviving pre-cibiculturists do not all inhabit the most favoured regions of the earth. Some, indeed—as, for example, the Bushmen, the Australians, and especially the Californians—dwell in lands where vegetation is often luxuriant and game is plentiful, but others, such as the Esquimaux and the Fuegians, live in barren countries. Yet no matter how favoured the region it cannot support more than a scanty pre-cibicultural population—a fact which suggests that its total yield of food must be that it is quite a mistake to suppose, as some have done, that the Australian native suffers habitually from a dearth of food, pointing out that by properly regulating their visits to different districts they can procure a rich supply of vegetable foods throughout the year; during the pigface[2] season, which lasts some months, the natives lead a comparatively easy life, and they are said to get fat during the bunya and pigweed seasons; again, Curr observes of certain Australian tribes that before the advent of the white man they were well supplied with animal food; and Farini alleges that during the water-melon seasons, of which there are two, the natives grow fat on the oleaginous seeds.

There can, however, be little doubt that the pre-cibiculturists have their seasons of dearth. Sir George Grey says that the Australian natives are apt to run short of supplies during the hottest time of the summer and the height of the rainy season; while, according to Featherman, the Bushmen are sometimes reduced to the necessity of

[2] A plant which grows all over the country.

gnawing at a piece of old dried gnu skin to allay the pangs of hunger, and he adds that "in the last resort they tighten the girdle"; again, we read how in times of want the Esquimaux eat almost anything, not hesitating to make soup of their tent-skins and even their old trousers!

In short, the pre-cibiculturists are liable to great fluctuations in the quantity of food at their disposal, sometimes being surrounded by plenty, when they are apt to glut themselves, and at others compelled to subsist on very slender rations, and even to go for days together without any food whatever. This having probably been the fate of our own ancestors for many hundreds of generations it may well have produced a racial effect—i.e., the human organism may have become so attuned to a diet which varies in quantity at different times of the year as to thrive best on such a one. And we may well consider whether it might not be better for us 15-grade humans, instead of taking the same quantity of food each day occasionally to vary its amount, sometimes greatly diminishing the daily allowance and at others indulging in a feast.

Even when a plentiful supply of food is available for the pre-cibicultural man it by no means follows that he is able to lead an indolent life; food does not, save in the land of Cockaygne, drop unasked for into his mouth, but has to be toiled for. Indeed, the food quest and the preparation of food loom large in the life of the pre-cibiculturist—absorb, in fact, his chief energies. There may be an abundance of game, but it needs to be hunted; the river may teem with fish, but the fish must be caught; nutritious seeds and roots may be plentiful, but they have to be gathered; finally, the vegetable food has to be prepared in ways which often involve much time and trouble. Thus pre-cibicultural man has to work for his food even though it be abundant. He lives an active life, his food is simple and does not tempt to excess, and even if he has bouts of gourmandising he also has intervals of enforced starvation. Hence though in seasons of plenty he may get plump he is seldom obese and rarely suffers from the other evils of excessive eating.

The seasonal rotation of food.—Season has a much greater influence on the diet of the pre-cibiculturists than on our own. The food of the former varies from month to month, nay, even from week to week. Thus we find the Californians in the early part of the year eating the bark of trees, then in due course clover, next roots, and about the middle of summer, salmon; thereupon various kinds of seeds come in season, then manzanita berries and pinon nuts, and finally acorns; while game and vermin of various kinds are consumed throughout the year. There is no such pronounced seasonal rotation of food among communities living in the modern cibicultural age. With the manifold facilities at our disposal for artificially producing, storing, and rapidly conveying food from place to place, we moderns are able to subsist upon much the same kind of food throughout the year. Butchers' meat, bird, fish, bread, rice, milk, cheese, butter, eggs, sugar, and some vegetables—e.g., potatoes—are available at all seasons. It is only in respect of certain highly perishable vegetable foods, such as green vegetables and certain fruits, that the influence of season makes itself decidedly felt and this influence is every year becoming less and less, now that new methods of storage are being constantly devised and more rapid means of transit from remote parts are provided.

The fact that we are descended from an ancestry whose diet has for untold ages varied considerably throughout the year may help to explain the evil effect of a monotonous diet and the advantage of varying it from time to time. This truth in well illustrated in the case of anthropoid apes kept in captivity; the keeper in charge of these apes at the London Zoological Gardens tells me that he finds it necessary constantly to vary their food, for if he does not, they get out of health; obviously under natural conditions it undergoes considerable seasonal change. We shall do well to bear this principle in mind when called upon to regulate the diet of our patients.

Domesticated animals.—The earliest animal domesticated by man is undoubtedly the dog. With the exception of the Andamanese all the pre-cibicultural peoples were already in possession of the dog when discovered by the white man. Dogs are employed in the hunt and are said to help the Australian natives in finding snakes, rats, and the like; the Veddahs train their dogs to follow up and to pull down the wounded deer. That the pre-cibiculturist may display affection towards the dog is evidenced by the fact that an Australian woman was seen crying over one that had been stung by a snake.

Feeding of infants among pre-cibiculturists.—It need scarcely be said that there is no artificial rearing of infants among the pre-cibiculturists: either the child is brought up on the mother's milk or it perishes. Hence mothers unable to suckle their children do not leave any offspring to inherit the incapacity. As to when the child begins to take other food and what the nature of the food is I have no information. Infants in Central Australia are often not weaned until they reach from two to three years of age. During this time they are given whatever they can eat, "except," one writer tells us, "certain kinds of vegetable foods which are likely to disagree." The Bushwomen nurse their children for a long time, but are said from the very first days of life to feed them upon chewed roots, meat, and other hard foods.

Time of meals.—The pre-cibiculturists do not appear to have any fixed time for meals. It is expressly stated of certain Californian tribes, of the Ainus, and of the Esquimaux that they eat at any time. Of the latter it is stated that "they did not eat all at once but each man when and as often as the impulse prompted him."

Miscellaneous facts.—Some Californian tribes eat dried whale-bone for dyspepsia, doubtless for the gelatin which it contains, on the same principle that isinglass is given as a household remedy for dyspepsia in our own country. The Californians have a custom of tying a lump of meat to a piece of string and after swallowing the meat pulling it up again, a process which they repeat ten or a dozen times, the better to enjoy the taste of the morsel.

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This completes our survey of the evolution of man's diet from anthropoid times to the beginning of the cibicultural period. The changes which his food has undergone during this latter period will, it is hoped, be dealt with on another occasion.

(Concluded.)

ASYLUM REPORTS.

London County Asylum, Banstead (Report for the Year ending March 31st, 1904).—The average number of patients resident during the year was 2450, comprising 1075 males and 1375 females. The admissions during the year amounted to 509—viz., 343 males and 266 females. Of these 439 were first admissions. Dr. D. Johnston Jones, the medical superintendent, states in his report that, as regards causation, alcoholic intemperance was the predisposing or exciting cause in 23·4 per cent. of male admissions and in 12·4 per cent. of females. Heredity, venereal disease, adverse circumstances, the menopause, epilepsy, and old age were the other chief causes, either predisposing or exciting. The large majority of cases admitted were those suffering from a first attack and admitted within three months of the onset of the disorder; they formed also the larger proportion of the recoveries. Two female patients who were pregnant on admission were safely confined and the children were removed to the care of friends. "The mental condition of both patients," adds Dr. Jones, "has improved considerably." The number of patients discharged as recovered during the year amounted to 203—viz., 96 males and 107 females, or 8·3 per cent. of the average number resident. The deaths during the year amounted to 189, or 7·7 per cent. as calculated on the same basis. Of the deaths nine were due to cerebral hæmorrhage, ten each to cancer and senile decay, 11 to pneumonia, 14 to epilepsy, 24 to cardiac disease, 31 to pulmonary and other forms of tuberculosis, 38 to general paralysis, and the rest to other causes. There were no inquests held during the year and the only serious casualties were four simple fractures of bones and two dislocations, all due to accidental causes, and all made good recoveries. The general health of the inmates has been satisfactory on the whole. "A large number of helpless—almost bedridden—cases have been admitted and

these, together with the numbers of general paralytics, who are utterly helpless and faulty in their habits, render the work of nursing on the male side much more anxious than formerly." As a precaution against fire extra emergency doors have been made, opening outwards from the recreation hall and stage to the grounds, the stage scenery has been made fireproof, extra exits have been made from the infirmary wards (ground floor) to the fire staircase, and the doors to the latter have been improved. "Communicating doors have been made between three of the bedrooms of the villa and an extra water-supply will shortly be available from Sutton." The Commissioners in Lunacy state in their report that the day rooms were in good condition and that the dormitories were clean and bright. The state of the bedding was also satisfactory. The general health of the institution was good and the dress and personal condition of the patients were for the most part satisfactory. The medical case-books were well and creditably kept. The committee of management states in its report that during the year advances have been made from the surplus balance of the asylum to the maintenance accounts of Cane-hill, Claybury, and Colney Hatch (£2500 each), and the Epileptic Colony, Ewell (£5000). The farm account shows a credit balance of £575. The expenditure on repairs, alterations, and improvements during the year amounted to £8126.

Stafford County Asylum, Cheddleton (Annual Report for 1903).—The daily average number of patients resident during the year was 620, comprising 303 males and 317 females. The admissions during the year amounted to 200—viz., 106 males and 94 females. Of these 181 were first admissions. Dr. W. F. Menzies, the medical superintendent, states in his report that 104 of the admissions were of a non-recoverable character, including congenital imbeciles and epileptic patients, senile and degenerative forms of insanity, and general paralysis. The total number of recoverable cases is estimated at 96. Pulmonary tuberculosis was present in 20 of the admissions, "a proportion which is high enough to make it doubtful whether so much of asylum phthisis as has been hitherto supposed is due to infection after admission." The number of cases of alcoholic insanity was 59, comprising 46 males and 13 females. Early in the year it was decided to segregate all cases of tuberculosis and this has been done by setting apart one ward on each side. "The two wards have been practically filled throughout the year and in many ways this method," says Dr. Menzies, "is more convenient than the provision of open-air shelters and is certainly cheaper, though no doubt hardly so efficient. The windows are all kept open night and day, the patients are outside in the airing court set apart solely for their use, or walking round the grounds for a minimum of six and three-quarter hours per day. ..... These patients never enter the main body of the asylum; they do not come to the dining-hall, or entertainments, or church, or the visiting-room. A special weekly service is conducted and entertainments given in the hall are repeated in the ward, where also the patients are visited by their friends." The number of patients discharged as recovered during the year amounted to 61—viz., 37 males and 24 females, or 9·8 per cent. of the average number resident. The deaths during the year amounted to 86, or 14 per cent. as calculated on the same basis. Of the deaths three each were due to senile decay, epilepsy and cardiac disease, five to pneumonia, ten to renal disease, 11 to cerebral atrophy, 14 to general paralysis of the insane, 16 to pulmonary and other forms of tuberculosis, and the rest to other causes. As regards the prevention of fire, 30 external hose boxes with fittings and additional lengths of hose have been fixed in various places where danger exists. Improvements have been made in the ventilation of the stores and laundry. Three cases of enteric fever and four of erysipelas occurred during the year, all of which recovered. The Commissioners in Lunacy state in their report that the patients were found to be dressed neatly and suitably, that the asylum was in excellent order throughout, that the wards were bright and comfortable, that the dormitories and bedding were in a satisfactory condition, and that the medical case-books and records were very carefully kept. "In addition to a considerable number of minor improvements we noticed with great satisfaction the improved ventilation of most of the single rooms, and we are glad to learn that this work will shortly be completed throughout the asylum." The committee of management states in its report that the fire brigade has been kept as far as possible efficient and that further planting has been done along the new road and outside the airing courts, adding to the beauty of the grounds.

NOTES FROM INDIA.

(FROM OUR SPECIAL CORRESPONDENT.)

Improvements for Madras City.—The Destruction of Life by Snakes and Wild Animals.—The Plague Epidemic.—The Unhealthiness of the City of Poona.

As Madras city has for so long been allowed to remain in an insanitary condition it is satisfactory to find that improvements are in progress and that several sanitary works are under consideration. The Madras municipality will soon be changed for a corporation with a new Act and constitution. The chief scheme is a great drainage scheme already commenced. This consists of a large cast-iron sewer nine miles long with six collecting wells situated at intervals of about one and a half miles into which cement pipe sewers receiving sewage from the streets will enter. The main sewer debouches on to a large tract of land which is already partly irrigated by the separate sewage installation of Black Town, and it is to be further extended to an area of some 200 acres, so as to make a valuable sewage-irrigated grass farm. The pumping stations near the collecting wells are under construction and the sewage will be pumped into the main sewer. The cost of the drainage scheme will be at least half a crore of rupees. Five pumping stations are expected to be ready by the next hot weather and should thus remove the offensiveness of the present open drains. The Black Town area of Madras has its sewage scheme at work. The sewage is collected into a well from which it is pumped to the area above referred to. The water of the seven wells by which the Fort is supplied was suspected to be contaminated by sewage and a leaky sewer was discovered in close proximity. Amongst other improvements a new bullock slaughter-house is approaching completion. There are also other works under consideration. First may be mentioned the water-supply upon which several schemes have been prepared. At last the Government has been asked to lend an officer to revise the proposals and to prepare a final scheme. One or two dhobikhanas (washhouses) are talked about, also a cattle market, a municipal cattle-shed, and a sheep slaughter-house.

Strenuous efforts are being made to reduce the loss of life annually occurring from snake-bite, but the death roll is at present very heavy. The human deaths last year from snake-bite are returned at 21,827, as compared with 23,167 in 1902, and the number of cattle destroyed by snake-bites is put at 9994. Rogers's simple and inexpensive instrument for the use of permanganate of potassium is being taken up and widely distributed. The human deaths from the attacks of wild animals numbered 2749, as against 2536 in 1902, and the number of cattle destroyed 86,232, as compared with 83,999 in the preceding twelve months. 48 deaths are supposed to have been caused by a single tigress infesting the Ambabhana jungle and one or two man-eating wolves were credited with almost all the deaths attributed to these beasts in the Budaun, Cawnpore, and Fatehpur districts.

The plague epidemic is once more growing apace. For the week ending Oct. 29th the records show 15,494 deaths as against 13,871 in the preceding week. The principal figures are: Bombay district 9636, as against 8172; United Provinces 1446, as against 1276; and Central India 998, as against 1170.

In Poona plague has been developing since July both in the city and cantonment. During the monsoon months Poona has been very unhealthy, large numbers of deaths having occurred from dysentery, diarrhœa, and enteric fever. The drainage of Poona is in a terrible condition and the water-supply from the open canal outside the city, though abundant, is exposed to contamination. As the city contains a population of about 100,000 it is high time that a scheme of sanitary improvement should be adopted.

Nov. 10th.

Obituary.

GEORGE VIVIAN POORE, M.D. LOND., F.R.C.P. LOND.,

EMERITUS PROFESSOR OF MEDICINE, UNIVERSITY COLLEGE, AND CONSULTING PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL.

As already mentioned in our columns, the medical profession in London, and indeed that of the whole country, has sustained a great loss by the death of Dr. George Vivian Poore which occurred at Priory Lodge, Andover, Hampshire, on Nov. 23rd.

Dr. Poore was born in Andover in 1843, being the youngest of the ten children of Commander John Poore, R.N., who had retired from the service on the reduction of the navy in 1815. His father's influence and example might have given him a bias for a sea life and at the age of ten years he was sent to the Royal Naval School at New Cross, where he remained until he was nearly 17. At this school he gained the medal for good conduct and was offered a marine cadetship which was placed at the disposal of the head-master by the Lords of the Admiralty. This, however, he declined, having felt that his inclination was to follow the medical profession. He accordingly then went to Broughton, in his native county, to acquire some preliminary medical training under Dr. Luther Fox of that place, the father of Dr. Tilbury Fox, Dr. Edward Fox, and Dr. Thomas Fox. On leaving Dr. Fox he matriculated at the University of London and entered as a student at University College. In 1866 he took the qualification of M.R.C.S. Eng. and acted as surgeon to the *Great Eastern* while that vessel was laying an Atlantic cable in the same year. At University College he obtained distinction as the Atkinson-Morley surgical scholar in 1867 and the University scholar in medicine in 1868. In 1868 he also graduated at the University of London as M.B. and B.S., proceeding to the M.D. degree in 1871. In 1870 he was admitted a Member of the Royal College of Physicians of London and in 1877 he was elected a Fellow of the College.

In 1870 and 1871 he travelled as medical attendant with Prince Leopold, Duke of Albany, who died in 1884. At an early period in his career Dr. Poore made a commencement of the literary work which was to become so fruitful in after years, for in 1870 he contributed to our columns some Remarks on the Management of the Imperial Hospital at Vienna. He was at that time resident medical officer to University College Hospital where it was one of his duties to administer chloroform and to teach students the use of anæsthetics. While thus engaged he compiled a complete course of instruction on the administration of chloroform, which was published in THE LANCET in 1872 when he was holding the appointment of lecturer on medical jurisprudence at Charing Cross Hospital. The electrical treatment of disease was at that time practised only in a desultory and occasional manner but Dr. Poore perceived that the subject was capable of development and delivered courses of lectures on medical electricity at the hospital. In 1876, by which time he had become assistant physician to University College Hospital and senior physician to the Royal Hospital for Children and Women, Dr. Poore published his "Text-book of Electricity in Medicine and Surgery," a work which was in its day the most complete and useful treatise on the subject. In 1881, being then professor of medical jurisprudence in University College, he delivered the introductory address at the opening of the medical session, taking medical education and medical language as his topics. In his references to "medical language" he dealt mainly with the intricacies of anatomical nomenclature and counselled his hearers to aim as much as possible at simplicity of phrase. In the same year he published a useful manual on the "Physical Diagnosis of Diseases of the Throat, Mouth, and Nose," and delivered the Bradshaw Lecture of the Royal College of Physicians of London on Nervous Affections of the Hand. This lecture appeared in book form in 1897. After about 34 years of active industry as a physician, clinical teacher, author, and practical sanitarian Dr. Poore's health began to fail. For this reason he found it necessary in May, 1903, to resign his appointments as professor of clinical medicine in University College and physician to University College Hospital, and on the 29th of the following month, at the house of Dr. F. T. Roberts, Harley-street, W., he was presented with a piece of plate and a testimonial from his colleagues in the Faculty of Medicine and the medical committee in recognition of his valuable services. Such is the bare record of the professional life of a brilliant teacher and thinker. Outside purely medical work Dr. Poore was well known to the medical profession and the public alike as a practical sanitarian. Of his many contributions to our pages none were happier than those in which he dealt with the hygiene of the street, with the water-supply of country districts, and with the curious ignorance of sanitary affairs that mars the mental equipment of middle-class England. In his articles he was witty, scholarly, and very clear, qualities which he displayed to great advantage as a lecturer and public speaker, and in such books as "London Ancient and Modern from the Sanitary and Medical Point of View." This interesting book, which was published in 1889, exactly typifies the contributions which our readers received from Dr. Poore's pen. The economical and profitable disposal of excrement and slop water was a favourite subject with Dr. Poore and was fully discussed by him in two treatises of striking originality—namely, "Essays in Rural Hygiene," published in 1893, and "The Dwelling House," published in 1897. He considered the health conditions of town life to be eminently unsatisfactory and was a resolute opponent both of the water-carriage system of sewage disposal and of high buildings. In the garden of his house at Andover he raised luxuriant crops of fruit and vegetables by manuring with a mixture of fresh fæces and earth, at the same time proving that the subsoil water remained perfectly wholesome and capable of use as a domestic supply. He used his experiments in this garden to prove many of his theories with respect to urban and rural sanitation and all his friends were welcome to observe his practical demonstrations.

A medical friend and intimate acquaintance of Dr. Poore writes to us as follows: "To any old friend of his the name of Dr. Poore recalls that of Marcus Beck. One used to think of them and speak of them as 'Beck and Poore' as one speaks of David and Jonathan or Damon and Pythias. They lived together as students in the well-remembered Gothic Cottage, Regent's-park, enjoying to the full the pleasures, while making the best use of the opportunities, of that eventful time of life, and, with the short interruptions of hospital residence and of the time when Dr. Poore was in attendance on Prince Leopold, they lived together in Wimpole-street and at Isleworth until Beck's death in 1893. Their mutual affection and esteem were obvious to all and their inseparability became proverbial. The points of agreement in their characters were as striking as the differences. Both were possessed of unusual keenness of intellect, of sparkling wit and racy humour, of most amiable dispositions, and a wholesome hatred of anything savouring of a sham. The conversation of both was not only piquant and amusing but luminous and instructive. But whilst most of Beck's teaching was only given *viva voce* and thus has left no permanent record of him, Poore, being more practical, made notes of everything he did and at one time or another worked it into some of his published writings. Beck shone amongst his own intimates and students who adored him but he hated all the 'pomps and vanities'; Poore, while equally admired by his friends and students, was more a man of the world, moved more freely in wider circles and actually enjoyed a prominent position in a public function. Their house was where contemporaries and younger men were sure of obtaining sound advice after careful consideration of their doubts or difficulties. It was a place where some new light was certain to be shed upon scientific manners; and to some of your readers at all events the word 'post-Pathological' will bring back pleasant evenings there in those old days when the Pathological Society was the scene of more animated debates than are ever heard there now. After Beck's death Poore seemed to age and some of his light-hearted brilliance apparently deserted him. His after-dinner speeches and other public utterances were remarkable. He was rather short of stature and slightly built and he had the appearance of being, as was indeed the case, a somewhat delicate man. It was therefore almost startling to hear his loud and well-trained voice filling the largest room with ease. His delivery was deliberate but not too slow, his gesture suitable and easy; his English, without being pompous, never descended into the colloquial; his matter was always well arranged; he did not repeat himself, and when he had done he stopped. His points were often enforced by some quaint or humorous illustration and, in short, it may be said that he was an orator of no mean

GEORGE VIVIAN POORE, M.D. LOND., F.R.C.P. LOND.,
LATE PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL.

order. He never spoke from notes, but he did not feel happy unless he had pretty full ones in his pocket. The present writer was too nearly of his age to have listened to his teaching at the hospital. It was always understood that he had a large following of students. They said that his lectures on medical jurisprudence and on medicine were excellent and even unique. It was often added, however, that their excellence consisted in the striking way in which the subject was presented and in their store of illustrative anecdote, but that they were not particularly adapted to prepare the student for the ordeal of the Conjoint Board. Alas, that this should be the criterion by which lectures are to be judged. It is a sad sign of the times. The great lecturers of the past, like his old teacher Jenner, were those who taught from personal experience and whose lectures, while reflecting their own individual thoughts, gave the hearers what no book can provide. Of such teachers Poore was a worthy successor. In the wards he was inclined to be dogmatic and his bedside teaching was couched in language almost as precise as that of his more studied speeches. He was happiest when some case of nervous disease formed the subject of his discourse. As a professor at University College and as a member of the staff of the hospital he rendered great services to each institution. He never professed to admire the somewhat cumbrous machinery of the College and the delays resulting from the necessity of the constant reference of all matters from one committee to another before it reached the Council, and he did not hesitate to express his disapproval both in public and in private. But he worked hard both as a member of the Senate and during the time he was dean of the Faculty of Medicine. At the hospital he will long be remembered as the originator of a plan for rebuilding which, although the present structure differs in external appearance from that which he devised, supplied the essential principle upon which the final plans were worked out. That principle is that each ward shall be completely separated by a 'cut-off' from the rest of the building, so that they shall all be entirely separated from one another. This made it possible to obtain the advantages of the pavilion system while erecting a building upon the limited site which was available. The underlying idea springs naturally from the study of the subject of domestic sanitation, to which so large a part of his life was devoted. The pursuit of this study and the dislike of the smoky atmosphere of London led him much into the country and may have made it appear to some that he looked at the country principally with the eye of a sanitarian. But this is not quite the correct view. He was no sportsman and no athlete but he had a real delight in the country for its own sake. Sanitation may have heightened his pride in his Andover home and he certainly did not tire of showing his giant gooseberries and monstrous apples or the pure water from the patent well in the middle of his scientifically fertilised garden. Even to the last he delighted to think that his guests could be supplied with luscious fruit and fresh vegetables from this garden, upon which he could look from his sick room. His illness was a lingering one and associated with many discomforts and inconveniences. For months the only possible end was obvious not only to his friends but to himself, but all was borne with patience and at times even with cheerfulness. No more appropriate place for the end of his life could be imagined than this peaceful spot in which he put to a practical test so many projects for the benefit of humanity."

ALFRED JOHN FREEMAN, M.D. ABERD., M.R.C.S. ENG.

Dr. Alfred John Freeman, who died on Nov. 27th at San Remo, after a very short illness, had for over 30 years held a foremost place among the English physicians practising on the Italian Riviera and had contributed in no small degree to the establishment of the reputation of San Remo as a health resort for British and American invalids. It had been known for some time that he suffered from an atheromatous state of the vessels. He was taken ill and fell down as he was on the point of visiting a patient about 5 P.M. on Nov. 26th. Soon afterwards he became unconscious and expired about 4 A.M. on the 27th. Dr. Freeman was born in London in 1844 and received his medical education at St. Thomas's Hospital and at the University of Aberdeen where he took the degrees of M.B. in 1866 and M.D. in 1870, having previously obtained the diploma of M.R.C.S. Eng. in 1865. While he was studying in Aberdeen his health was far from good and he was advised to make his residence in a southern climate. He accordingly spent a few months in France, acting for a time as medical attendant to Archbishop Tait, and then settled in San Remo where he continued to practise till the time of his death. He was the author of "Medical and Climatic Notes on San Remo and the Italian Riviera," published in "Ball's Mediterranean Winter Resorts." In 1871 he married Miss E. L. Hopewell of Abington Abbey, Northamptonshire, who survives him. The funeral took place on Nov. 30th.

CHARLES WILLIAM CHALDECOTT, M.R.C.S. ENG., L.S.A.

Mr. Charles William Chaldecott of Dorking, Surrey, who died on Nov. 5th, was born in 1828 and received his professional training at St. Thomas's Hospital, where he studied from 1848 to 1851, gaining a number of honorary certificates and prizes, among which was the treasurer's silver medal for general proficiency. In 1851 he became qualified as M.R.C.S. Eng. and L.S.A. but did not hold any of the resident appointments at the hospital which were open to him, as it was necessary for him to take over his father's practice at Dorking immediately. From that date until his retirement in 1901 (exactly half a century) Mr. Chaldecott was in the active pursuit of a very large practice. He was twice married, his first wife, who died in 1866, being a sister of the late Sir John Simon, and he leaves a family of nine sons and daughters.

Sir Dyce Duckworth writes concerning him: "The late Mr. Charles Chaldecott of Dorking was one of the best and most worthy country practitioners I have known. I can add my testimony to his many excellent qualities from a friendship of some 34 years. He was always careful, prudent, and dependable, assiduous in his duties, and concerned to afford the best assistance to his patients. With the latter he commonly established firm and warm friendships. Straight but simple, without any affectation or assumption of superior knowledge, he was a thoroughly trained, experienced, and shrewd practitioner. In his long career he had to encounter not a few sore trials but he bore them nobly as a high-minded Christian gentleman. He has left behind him a fine example in all the relations of life and he well upheld the position and dignity of our profession in his neighbourhood, where he earned the respect and affection of all with whom he came in contact. May he rest in peace."

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are announced:—Dr. W. Massen, professor of midwifery and gynæcology in the University of Odessa.—Dr. A. Sanchez Herrero, professor of clinical medicine in the University of Madrid.—Dr. K. von Stellwag, formerly professor of ophthalmology in the University of Vienna.—Dr. Albert Reder v. Schellmann, formerly professor of dermatology in Vienna, at the age of 78 years.—Dr. Alfred Zimmermann, a Vienna staff surgeon who was a very experienced operator, especially in abdominal cases. His death was due to septic poisoning. He was only 39 years of age.—Dr. Redtenbacher, one of the medical officers of the Vienna General Hospital.—Dr. Hugo Mittenszweig, one of the editors of the Berlin *Zeitschrift für Medicinalbeamte*.—Dr. Robert Langerhans, *privat-docent* of pathological anatomy in the University of Berlin.—Dr. Joaquim Pereira da Cunha, professor of ophthalmology in the University of Rio de Janeiro.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In 76 of the largest English towns 8518 births and 6326 deaths were registered during the week ending Dec. 3rd. The annual rate of mortality in these towns, which had been 15·7, 16·6, and 17·3 per 1000 in the three preceding weeks, further rose to 21·6 per 1000 last week. In London the death-rate was 21·7 per 1000, while it averaged 21·6 per 1000 in the 75 other large towns. The lowest death-rates in these towns were 5·8 in Hornsey, 11·3 in West Hartlepool, 11·7 in Kings Norton, 12·3 in Aston Manor, 12·7 in Walthamstow, 13·3 in Wolverhampton, 13·4 in Rotherham, and 13·7 in Huddersfield; while the highest rates were 29·1 in Birkenhead, 30·0 in Gateshead,

30·1 in Stockport, 30·3 in Manchester, 30·7 in Wigan and in Middlesbrough, 30·9 in Smethwick, and 32·4 in Tynemouth. The 6326 deaths in these towns last week included 482 which were referred to the principal infectious diseases, against 380, 444, and 400 in the three preceding weeks; of these 482 deaths, 151 resulted from measles, 89 from diphtheria, 69 from whooping-cough, 63 from diarrhœa, 54 from "fever" (principally enteric), 53 from scarlet fever, and three from small-pox. No death from any of these diseases was registered last week in Willesden, Hornsey, Hastings, Brighton, Ipswich, Great Yarmouth, Kings Norton, Barrow-in-Furness, Huddersfield, or Rotherham; while the highest death-rates from the principal infectious diseases were recorded in Bristol, Hanley, Grimsby, Liverpool, St. Helens, Middlesbrough, Stockton-on Tees, and Gateshead. The greatest proportional mortality from measles occurred in Bristol, Grimsby, Liverpool, Bootle, Wigan, Middlesbrough, Stockton-on-Tees, and Gateshead; from scarlet fever in Plymouth, Warrington, and York; from diphtheria in Hull; from whooping-cough in Hanley and South Shields; from "fever" in Rhondda and Merthyr Tydfil; and from diarrhœa in Hanley. Of the three fatal cases of small-pox registered in these towns last week, one belonged to Halifax, one to Gateshead, and one to Newcastle-on-Tyne. Three cases of small-pox remained under treatment in the Metropolitan Asylums hospitals on Saturday, Dec. 3rd, and two new cases were admitted during the week. The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of last week was 2625, against 2843, 2774, and 2741 at the end of the three preceding weeks; 247 new cases were admitted during the week, against 294, 259, and 262 in the three preceding weeks. The deaths in London referred to pneumonia and diseases of the respiratory system, which had been 324, 361, and 385 in the three preceding weeks, further rose last week to 565, and were 207 above the number in the corresponding period of last year. Influenza was certified as the primary cause of 26 deaths in London last week, against 24, 18, and 30 in the three preceding weeks. The causes of 81, or 1·3 per cent., of the deaths in the 76 towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in West Ham, Bradford, Leeds, Cardiff, and in 37 other smaller towns; the largest proportions of uncertified deaths were registered in Leyton, Hanley, Leicester, Liverpool, St. Helens, Rochdale, Sheffield, and Gateshead.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in eight of the principal Scotch towns, which had been 17·5, 17·3, and 18·0, per 1000 in the three preceding weeks, further rose to 21·2 per 1000 during the week ending Dec. 3rd, but was 0·4 per 1000 below the mean rate during the same period in the 76 large English towns. The rates in the eight Scotch towns ranged from 15·6 in Edinburgh and 16·5 in Greenock to 23·9 in Glasgow and 24·8 in Paisley. The 702 deaths in these towns last week included 34 which were referred to whooping-cough, 16 to measles, 10 to diarrhœa, six to diphtheria, four to "fever," and one to scarlet fever. In all, 71 deaths resulted from these principal infectious diseases last week, against 59, 47, and 60 in the three preceding weeks. These 71 deaths were equal to an annual rate of 2·1 per 1000, which was 0·5 per 1000 above the mean rate last week from the same diseases in the 76 large English towns. The fatal cases of whooping-cough, which had been 19 and 21 in the two preceding weeks, further rose to 34 last week, and included 25 in Glasgow and seven in Edinburgh. The deaths from measles, which had been eight, five, and eight in the three preceding weeks, further rose last week to 16, of which 11 were registered in Aberdeen, three in Leith, and two in Glasgow. The fatal cases of diarrhœa, which had been 27, 19, and 18 in the three preceding weeks, further declined to 10 last week, and included three in Glasgow, two in Dundee, and two in Aberdeen. The deaths from diphtheria, which had been three, two, and nine in the three preceding weeks, decreased again last week to six, of which four occurred in Glasgow, where three of the four fatal cases of "fever" also were registered. The deaths referred to diseases of the respiratory organs in these towns, which had been 136, 154, and 174 in the three preceding weeks, further rose last week to 190, and were 52 in excess of the number in the corresponding period of last year. The causes of 21, or nearly 3 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 20·2, 24·2, and 22·6 per 1000 in the three preceding weeks, rose again to 27·0 per 1000 during the week ending Dec. 3rd. During the past four weeks the death-rate has averaged 23·5 per 1000, the rates during the same period being 17·7 in London and 16·7 in Edinburgh. The 196 deaths of persons belonging to Dublin registered during the week under notice were 28 in excess of the number in the preceding week and included 20 which were referred to the principal infectious diseases, against 12, 20, and 21 in the three preceding weeks; of these, 12 resulted from measles, three from whooping-cough, three from diarrhœa, one from diphtheria and from "fever," but not any from small-pox or scarlet fever. These 20 deaths were equal to an annual rate of 2·8 per 1000, the death-rates last week from the principal infectious diseases being 1·6 in London and 1·3 in Edinburgh. The fatal cases of measles, which had been seven, eight, and 12 in the three preceding weeks, were again 12 last week. The deaths from whooping-cough, which had been four in each of the two preceding weeks, declined to three last week. The fatal cases of diarrhœa, which had been five and four in the two preceding weeks, further fell last week to three. The 196 deaths in Dublin last week included 32 of children under one year of age and 54 of persons aged 60 years and upwards; the deaths both of infants and of elderly persons were slightly in excess of the respective numbers recorded in the preceding week. Five inquest cases and two deaths from violence were registered; and 70, or more than a third, of the deaths occurred in public institutions. The causes of 9, or nearly 5 per cent., of the deaths registered in Dublin last week were not certified.

THE SERVICES.

ROYAL NAVY MEDICAL SERVICE.

THE following appointments are notified:—Fleet Surgeon C. Bradley to the *President* for three months' course of hospital study. Staff Surgeon F. Bradshaw to the *President* for three months' course of hospital study. Surgeons: R. Waterfield to the *Gibraltar*; W. G. Edwards to the *Juno*; R. R. Fasson to the *Cormorant*; J. O'Hea to the *Excellent*; and C. T. Baxter to the *Britannia*.

The undermentioned have been appointed Surgeons, viz.:—Fernand Louis Joseph Marie de Verteuil, Lidbrooke Frank Cope, Horace Bryden Hill, Kenelm Digby Bell, James Richard Alexander Clark-Hall, Francis Hernaman-Johnson, Percy Montgomery Rivaz, Henry Mounsey Braithwaite, Duncan Gordon Addison-Scott, Arthur Sylvester Bradley, Lawrence Charles Hunt, Charles Robert Worthington, Patrick Duncan McIver Campbell, Ernest Davis Rutherford, Frederick George Wilson, Henry Cooper, James McAlister Holmes, Richard Willan, Alfred Oswald Hooper, Henry Strawson Turner, Maurice Willoughby Haydon, Samuel Henry Vickery, Robert Hunter McGiffin, Edward Michael William Hearn, and Alexander James MacDiarmid (dated Nov. 21st, 1904).

ROYAL ARMY MEDICAL CORPS.

Captain M. H. G. Fell, from the Seconded List, to be Captain (dated Oct. 21st, 1904).

ARMY MEDICAL RESERVE OF OFFICERS.

Surgeon-Lieutenant A. Robinson, 2nd Volunteer Battalion York and Lancaster Regiment to be Surgeon-Lieutenant (dated Dec. 7th, 1904).

ROYAL ARMY MEDICAL CORPS (MILITIA).

Frederick Edward Bissell to be Lieutenant (dated Dec. 3rd, 1904).

IMPERIAL YEOMANRY.

Lincolnshire: Major Thomas Horrocks Openshaw, C.M.G., from the London Companies Royal Army Medical Corps (Volunteers), to be Surgeon-Major (dated Dec. 3rd, 1904).

VOLUNTEER CORPS.

Royal Garrison Artillery (Volunteers): 1st Forfarshire: Surgeon-Captain D. M. Greig to be Surgeon-Major (dated

Dec. 3rd, 1904). 1st Hampshire: Surgeon-Lieutenant A. A. MacKeith to be Surgeon-Captain (dated Dec. 3rd, 1904).

Rifle: The Queen's Rifle Volunteer Brigade the Royal Scots (Lothian Regiment): John Dixon Comrie to be Surgeon-Lieutenant (dated Dec. 3rd, 1904). 21st Middlesex (the Finsbury): Brigade-Surgeon-Lieutenant-Colonel J. Adams, Senior Medical Officer, 5th London Volunteer Infantry Brigade, is granted the honorary rank of Surgeon-Colonel (dated Dec. 3rd, 1904). 1st London: Brigade-Surgeon-Lieutenant-Colonel W. R. Smith, Senior Medical Officer, 4th London Volunteer Infantry Brigade, is granted the honorary rank of Surgeon-Colonel (dated Dec. 3rd, 1904). 4th London: Surgeon-Lieutenant F. J. P. Daly resigns his commission (dated Dec. 3rd, 1904). 1st Volunteer Battalion the Durham Light Infantry: The undermentioned officers are granted the honorary rank of Surgeon-Colonel: Brigade-Surgeon-Lieutenant-Colonel J. W. Blandford (dated Dec. 3rd, 1904) and Surgeon-Lieutenant-Colonel G. Middlemiss (dated Dec. 3rd, 1904). 1st Volunteer Battalion the Highland Light Infantry: Surgeon-Lieutenant J. F. Findlay resigns his commission (dated Dec. 3rd, 1904). 15th Middlesex (The Customs and the Docks): Surgeon-Lieutenant-Colonel F. W. Humphreys is granted the honorary rank of Surgeon-Colonel (dated Dec. 3rd, 1904).

ROYAL ARMY MEDICAL CORPS (VOLUNTEERS).

The London Companies: The undermentioned Captains resign their commissions: C. H. Gage-Brown (dated Dec. 3rd, 1904) and H. Fulham-Turner (dated Dec. 3rd, 1904). Argyll and Sutherland Bearer Company: Brownlow Riddle to be Lieutenant (dated Dec. 3rd, 1904). South Yorkshire Bearer Company: Alexander French to be Lieutenant (dated Dec. 3rd, 1904).

THE NEW DRESSING PACKET FOR THE SPANISH ARMY.

Adopting the principles that wounds caused by projectiles of small calibre may be regarded as practically aseptic and that all wounds when not infected are better treated aseptically than antiseptically, the Spanish military authorities have sanctioned the issue of a sterilised dressing packet which includes no antiseptic substance. The contents of the packet are as follows: (1) An external impermeable envelope 12 centimetres by eight, having rounded corners: three of the sides are stitched, the stitches being covered with a double layer of waterproof varnish, and on the outside the instructions for use are plainly printed; (2) an inner envelope made of paper-parchment; (3) two safety pins six centimetres long, wrapped in paper; (4) two compresses ten centimetres by seven, made of anhydrous cotton, weighing each eight grammes, and placed between two layers of gauze; and (5) a cotton bandage.

THE USE OF MOTOR VEHICLES IN WAR.

A War Office committee has been appointed to inquire into, and to report upon, this subject. Sir William Taylor, the Director-General of the Army Medical Service, recently witnessed trials of a new application of the Ivel motor adapted for the use of the medical service in the field. It is thought that an armoured motor system might render good service in the field if made applicable to ambulance purposes.

THE JOURNAL OF THE ROYAL ARMY MEDICAL CORPS.

The December issue of this journal strikes us as a good one. It contains quite a large number of papers on a variety of subjects not only specially connected with service matters but with subjects of clinical and scientific interest, together with some good reports of cases.

THE WAR IN THE FAR EAST.

The interest in the little news there is from the seat of war is mainly focussed on Port Arthur where the fighting continues as fiercely as ever but with what result is still unknown except as regards the effect of the shelling of the Russian warships. A brief armistice was recently agreed upon for the purpose of burying the dead and removing the wounded consequent upon the late assaults. From the region of the Shaho we hear of frequent encounters but these are not on such a scale as to give them any great importance. Just at the present time, and with the Baltic fleet on its way, everything turns on the fate of Port Arthur. The long time during which that fortress has held out—the siege has lasted about six months—had probably not been expected by the Japanese and has deranged their strategical plans. Be this as it may, the fighting at Port Arthur has given rise to an enormous number of casualties, especially on the side of the besieging force, and has also rendered the Japanese generals in Manchuria unexpectedly slow in carrying out their movements. Meanwhile we learn that energetic preparations, both military and naval, are being made in Japan in view of the approach of the Baltic fleet. From a purely medical point of view there is but little to be said. A large number of sick are still in the Russian hospitals in and around Mukden, where the difficulties of communication and administration are said to be great owing to defective organisation and to the officials being overburdened with work.

At the last sitting of the tuberculosis committee of the Society for the Preservation of Public Health in St. Petersburg on Nov. 28th Mr. R. C. Morkotoon raised the question of watching the cases of consumption amongst the land and sea forces in the present war, "which," he said, "is being fought under very trying conditions and will doubtless be distinguished by an increase in the number of cases of tuberculosis in the army. Many soldiers and sailors return from the front with a lowered vitality and easily become susceptible to the disease. Further, as these men will be distributed all over Russia they will tend to plant the disease generally amongst the people. Therefore their cases call for special attention, particularly in connexion with the health resorts where they will be undergoing treatment." In the discussion which followed the *Novosti* reports that the need for clearer instructions to the medical men was insisted upon, there being only one article in the military law to guide them and that article is very indefinite. The medical man has now only a consultative voice. He does not decide on the acceptance or rejection of a recruit.

Much inconvenience is being experienced in the hospitals at Kharbin, says the *Novoe Vremya*, owing to the insufficient supply of milk.

Looking Back.

FROM

THE LANCET, *SATURDAY*, Dec. 9, 1826.

The engine,[1] constructed in the manner we have just seen, had many peculiarities in its formation and government to account for its success and imperfections.

At the era of its establishment, the science which it professed to teach was in as low a condition in these countries, as the ideas of men were unenlightened on the subject of medical education. Under such circumstances any alteration might well have passed for an improvement. In the field of tuition it had no rival to dispute the prize of superiority, and victory consequently became an easy attainment. The Colleges of Oxford, Cambridge, and Dublin were already borne down by the corpulency of wealth, while its metropolitan locality gave it a facile ascendancy over its provincial sisters in Scotland. The stimulants of poverty, that "mother of excellence," as it has been called by the Roman Satirist, exercised in its case a salutary influence. There was no sinecure to secure its professor against a neglect of duty—no thousands of fertile acres to support him in learned indolence. His necessities daily reduced the farce of "No Song no Supper" into the drama of real life. The state of things at home compelling pupils to go abroad, it would require but moderate abilities in teachers, and partial opportunities of learning, to stop this tide of studious emigration. Of this the founders of the school seemed perfectly aware, and took care to transfer into the new concern some of the methods of teaching practised in the foreign seminaries, such as the system of clinical instruction, for overlong the boast of the Royal Infirmary. A succession of men eminent in their respective pursuits, but whose equals might be found in every country if the principles acted on by the patrons of this school in the selection of professors were only attended to, conferred a lustre on the establishment in its infancy. Left in some measure without a choice, reduced by fame, and pretty certain of a diploma, students naturally crowded to its halls, and dispersing again into the walks of life, communicated a fresh impulse to the growth of its "laurels." Every succeeding graduation day gave it so many new partisans as it bestowed diplomas, the young doctor having a personal interest involved in its praise, while the old "Sangrado," shaking

powder and parables from his wig, gave the irresistible sanction of his experience to the eulogium of his juvenile friend. To inflate the bubble of its reputation, the press was called into action.—Theses, essays, pamphlets, every thing in the shape of a book, from a single sheet to a five hundred-page quarto, proclaimed Edinburgh the seat of the medical sciences. If original works could not be composed, foreign ones of merit immortalized translators, while others crawled into notice in an "improved edition," or made their way into notoriety in a heap of "commentaries," as useless as the obscure lumber which they were intended to illuminate. Success only generated a further spirit of enterprise; and to increase the number of pupils rather than to provide them with the materials of solid instruction, would seem to have been the object contemplated in every regulation formed by the conductors of the school. Through the interference of fathers and friends with the Senate and Patrons, catchpenny professorships successively arose out of the mangled body of the science in ghastly pomp, and their certificates made a part of the gaudy *curriculum* of education. Vapid prelections on the theory were substituted for the actual practice of physic, and demonstrations on an occasional putrid subject supplied the place of manual anatomy. But behind this gorgeous trellis of books, lectures, professors, and other didactic paraphernalia, there was nothing substantive, practical, or valuable; the whole was a mere pageant passing before the eyes of men, but so artfully conducted that it was mistaken for a reality—for at no period did Edinburgh ever present employment for more than sixty or eighty pupils. Where was such employment to be found—that employment which, exercising the body and the mind, improves the faculties of both, not that visionary application to hear-say knowledge which scarcely leaves an impression behind? Not, surely, in the crowded wards of one hospital, or in the dissecting-rooms whose atmosphere was seldom vitiated by the odour of anatomy. To accommodate the superficial qualifications of the victims of this system of delusion, the difficulty of examination was reduced to a minimum, and to give the process a semblance of learning and severity, it was conducted in a dead language, in which not one in five hundred, though he were well informed, could give any indication of his knowledge. Anglo-Latin theses elaborated out of Ainsworth, or purchased ready-made for a guinea, were put forward with the same obliquity of purpose, as tests of a graduate's classical and professional attainments. The scheme was so judiciously arranged, and the "summi honores" so liberally divided in the wheel, that to purchase a ticket was to insure a prize. In short, the mercenary principles of political economy were as rigidly acted on in the management of the school, as in the working of a steam factory, and to produce the greatest quantity, without any reference to the quality, in the shortest space of time, and with the least expenditure of labour, became the main spring of action. The forcing system thus established, necessarily produced in the medical the same effects as in the mercantile world, a supply exceeding the demand, until every village in the empire could exhibit a brace of Edinburgh M.D.'s reposing under one blanket, or doling out death and physic to the community from behind one counter.[2]

[1] Edinburgh University.
[2] Excerpt from letter from "Scotus" to THE LANCET, headed "Sketches of the Medical Schools of Scotland. No. II."

Correspondence.

"Audi alteram partem."

MEDICAL MEN AND THE SUBPŒNA AD TESTIFICANDUM.

To the Editors of THE LANCET.

SIRS,—It is important that medical men should know what course to pursue when served with a subpœna to attend and give evidence in a court of law, but it is not always possible to act as you suggest. It might not, indeed, be prudent, since the solicitor might be acting for a blackmailer or might have a speculative interest in the issue. In the case on which you commented in your leading article of Dec. 3rd I was unable to communicate with the person responsible for the subpœna, since no address was given, and I was strongly disposed to pay no attention whatever to the summons, but I took the precaution of communicating with the solicitors of the London and Counties Medical Protection Society, Messrs. Le Brasseur and Oakley, and was advised that it would be unwise to do so. A statement of the circumstances was laid before the judge through the solicitors, and an arrangement was made, through his lordship's kindness, by which the annoyance and loss of time were minimised. The case was called at the opening of the court and before it was entered upon at all the judge asked the plaintiff what evidence she wanted from me, with the result that I was allowed to leave in a few minutes without even being sworn. I may, perhaps, take this opportunity of expressing my appreciation of the courtesy and consideration shown by the secretary and solicitors of the Medical Protection Society, to whom I have had recourse on more than one occasion when my name has attracted the attention of owners of secret remedies.

I am, Sirs, yours faithfully,
Dec. 6th, 1904. W. H. BROADBENT.

A DISCLAIMER.

To the Editors of THE LANCET.

SIRS,—My attention has been called to the appearance in several lay papers of some observations of mine on "temper powders" as if they had been written for the lay press. As a matter of fact, these are quotations from a paper on the Use of Salicylate of Sodium and Bromide of Potassium in the Irritable Temper of Cardiac Disease and Gout. This paper appeared in the *Practitioner* for July, 1896, and parts of it having been quoted without acknowledgment of its source by one paper they were reprinted by others. Hence my remarks, intended solely for medical readers, have been supposed to be written for the general public. I regret this very deeply, for I think that had I done this, as many believe that I have, I should have been guilty of conduct derogatory to the profession to which I belong and naturally I am much grieved that I should be supposed to be guilty of this. I regret also that the quotations may do actual harm to health because the drugs mentioned, though perfectly safe in the hands of the medical practitioners for whom the paper was written, may prove mischievous in the hands of persons ignorant of their properties.

I am, Sirs, yours faithfully,
LAUDER BRUNTON.
Stratford-place, Cavendish-square, Dec. 5th, 1904.

EPSOM COLLEGE.

To the Editors of THE LANCET.

SIRS,—In as few words as possible I would put before your readers the claims of the Epsom College Royal Medical Foundation to their support. It gives pensions of £30 per annum to 50 aged medical men or their widows, and boards, clothes, and educates 50 sons of necessitous medical men free of charge. The council has to collect year by year contributions to a sum of about £6000 to fulfil these duties which they have taken upon themselves. No one can doubt that the medical profession is exposed to more risks than other professions, and in the case of those living in the tropics and at many other stations abroad these risks are increased.

Do we reach all classes of the profession when in need? We claim that we do, for at present we have pensioners residing in Africa, Australia, and France. The sons of medical men, as foundationers, receive a first-class education free of cost and it is worthy of note that many of these lads rise to the highest positions in college and after leaving Epsom attain to high rank in political, medical, or commercial life. To maintain this great charity is a tremendous strain and we need more support. A simple way out of our present difficulty would be to reduce the number of pensioners and foundation scholars but the council are loth to adopt this course in view of the large number of candidates awaiting election. With the loyal assistance of friends they have managed to maintain 50 of each class for many years past and they are most anxious to continue to do this.

If we perform the duties I have referred to I would venture to suggest we deserve to be assisted. The main details of our life for more than 50 years will be found in the prospectus which the secretary will gladly forward to

applicants. I am arranging that almost every governor abroad and in the colonies shall receive his voting paper in time to return it for the annual election. The scheme of education is on the lines of a first-class public school: we receive our boys from all classes and prepare them for every department in life. The record of school successes will, I think, show that parents can send their sons to us with every confidence that they will receive a first-class education at a most reasonable charge and that they will mix with a good gentlemanly lot of companions. Epsom College is peculiarly well fitted to receive the sons of medical officers in the naval, military, and civil services.

I would ask the pecuniary aid of your readers for the charitable part of our work and their confidence in our school. The great schools of England have their foundations in realised property; we are at present dependent on the support of friends and well-wishers subscribing to keep us year by year. The public owe the medical profession much: might we not ask for subscriptions from those who recognise their indebtedness? To many old supporters in my difficult task of obtaining contributions I wish to take this opportunity of tendering my warmest thanks.

I am, Sirs, yours faithfully,
C. HOLMAN, Treasurer.

37, Soho-square, London, W.C., Dec. 5th, 1904.

THE ANNUAL MEETING OF THE FELLOWS AND MEMBERS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

To the Editors of THE LANCET.

SIRS,—As one who has attended all these meetings from their commencement, and has had much to do with the organisation of the Members' Society, I thank you for the sympathetic article in THE LANCET of Dec. 3rd. There is no doubt that the situation is very much as you describe it. We belong to a practical profession, and it is no matter for surprise that the bulk of the Members refuse to attend meetings at which their votes count for nothing and which lead to no result whatever. How much longer we shall consider it our duty to attend these meetings I cannot say; personally I think not long. They will then have to cease for want of a quorum, as those of the Fellows have done. With the meetings will also cease all interest on the part of the Members in the College, which will be regarded by all, as it now is by many, as an institution with which it is desirable to have as little to do as possible when once its diploma has been obtained.

For 20 years the Council has had the opportunity of making the College a popular institution and of maintaining an interest in its proceedings among all its Members. For 20 years it has refused to take a single step in this direction beyond circulating its report among those who apply for it. The fact that between 3000 and 4000 Members have so applied shows that there is still a large amount of interest in the College existing, in spite of the repellent and even hostile attitude of the Council. If nothing can be done under the present President, who is an expert on the whole question, nothing can be done at all. The matter rests with the Council. At the slightest indication of a more conciliatory attitude on their part the theatre would be filled, as in the old days, from floor to ceiling. Otherwise the College will be left, so far as the Members are concerned (in Bismarck's elegant phrase), "to stew in its own juice."

I am, Sirs, yours faithfully,
W. G. DICKINSON.

Dec. 5th, 1904.

CANCER OF THE CERVIX COMPLICATING LABOUR.

To the Editors of THE LANCET.

SIRS,—Dr. Amand Routh in his letter in THE LANCET of Dec. 3rd, p. 1612, has not given facts justifying his opinion that the conservative operation is "the correct one" or refuting my statement tha tthe Porro operation with the use of the serre-nœud is safer than the conservative operation in cases of advanced cancer complicating labour. He makes, however, two serious misstatements which I would ask your permission to correct. He says of me: "He does not bring forward any case of his own in support of his view." This statement is contrary to fact. Not only did I at the Obstetrical Society read an account of a case successfully treated by this method but a printed abstract and table containing its essential features were in the hands of the Fellows attending the meeting, of whom Dr. Armand Routh was one. Again, Dr. Armand Routh says: "Sarwey, however, does actually compare the two operations in question." This statement also is inaccurate. Sarwey compares the conservative operation with Porro's operation without discriminating between cases treated by the extraperitoneal method and those treated by the intraperitoneal method which I showed in my paper to be very dangerous in skilful hands. Even had Sarwey done what Dr. Amand Routh erroneously says he did, his figures would not have had the value of the more recent and larger figures contained in the great statistical work, "L'Operazione Cesarea Porro," which aims at giving all the accessible cases of "Porro's operation" performed in all countries from 1876 to 1901, and which Dr. Armand Routh disingenuously calls "foreign statistics." To repeat, the fullest and most recent statistics which I have been able to find show the mortality of the conservative operation to be about 60 per cent. and that of the Porro operation to be about 35 per cent., or, as Dr. Routh says, 36·8 per cent.; that is, the old Porro operation has only about six-tenths of the mortality of the conservative operation.

I am, Sirs, yours faithfully,
HERBERT R. SPENCER, M.D. Lond.

Harley-street, Dec. 5th, 1904.

THE ACTION OF PERCHLORIDE OF IRON IN BLOOD POISONING AND OTHER DISORDERS.

To the Editors of THE LANCET.

SIRS,—I am pleased to see the letter of Dr. P. W. Latham in THE LANCET of last week and hope that this discussion may lead someone to try chlor-albumins as a substitute for more irritant preparations. He asks if chlorine is given off as such from these compounds. This question would be better answered by my friend Dr. Hopkins, but I presume that hydrochloric acid, at any rate, is not formed because a solution of chlor-albumin in very dilute alkali slowly loses chlorine, yet no precipitation of the chlor-albumin occurs such as takes place on the addition of an acid. Dr. Latham appears to think that because Carius's method was used to estimate chlorine in these bodies, therefore they are extraordinarily resistant to dissociation. This is by no means the case. On the contrary, their alkaline solutions lose chlorine, as above mentioned, on merely standing in the cold, while the dry substance is partly decomposed on heating to 100° C. My point, however, is that there is evidence that the organism in fever has need of chlorine and ordinarily must obtain it from such a stable salt as sodium chloride. Now what more suitable substance could be imagined for supplying chlorine to the blood or tissues than a direct compound of chlorine with blood serum in a very weak alkaline solution which slowly yields up its chlorine? In conclusion, since Dr. Latham raises the question of the value of sodium chloride as a therapeutic agent I may mention that it has been recommended for the treatment of fever by no less authorities than Graves of Dublin[1] and William Stokes,[2] more recently by Torald Sollmann,[3] and von Moraczewski,[4] not to mention your very humble servant.

I am, Sirs, yours faithfully,
G. C. GARRATT.

Dec. 6th, 1904.

SMOKE AND FOG.

To the Editors of THE LANCET.

SIRS,—The somewhat disheartening annotation in THE LANCET of Nov. 26th, p. 1515, which includes such statements as "the fog last week was as bad, as persistent, as dense, and as irritating as ever," needs some answer from those who, like myself, are optimistic as to the result of the smoke abatement movement on the London fog. It has never been contended that London can be more free from fog than other parts of the country in England when meteorological conditions are such as to produce fog. The contention has been that London suffers much more from fog than surrounding parts and particularly the neighbouring parts of

[1] Dublin Journal of Medical Science, vol. vii., p. 136, 1836.
[2] Ibid.
[3] American Journal of Physiology, vol. viii., p. 155, 1902.
[4] Zeitschrift für Klinische Medicin, vol. xxxix., p. 44, 1900.

the Thames valley and that the extreme prevalence here is due to the charging of the atmosphere with the products of incomplete combustion of coal. The statistics of the Meteorological Office prove that we lose in winter 50 per cent. of the sunshine which districts adjoining London enjoy and also prove that on days when there is no fog in London the atmosphere is so charged with particles as to become opaque in a short distance; for instance, it has been proved that during December and January (on days when there is no fog) the top of St. Paul's Cathedral is not visible from the top of Westminster Abbey, a distance only of one and one-third miles. The fogs which we have experienced lately in London were prevalent also down the central parts of England and it was not likely that we should escape them, but in spite of your statement that they were "as bad and as dense" as ever I cannot bring myself to believe it, for, bad and irritating as they were, it has been a matter of common observation by all those with whom I have discussed them that they were the least black of all the fogs we have ever experienced. There was not one day (at any rate, in the West End) in which they were either thick yellow, or brown, or black, and although all the conditions were present for producing the "London particular" it was conspicuous that the "pea-soup" condition was absent. Your columns have always been so friendly to any efforts made in the direction of diminishing smoke that I venture to hope that your article will not have the effect of destroying your readers' hopes of future improvement.

The efforts of the Coal Smoke Abatement Society are now being continued with renewed energy and the society trusts that those authorities, one of which is referred to in THE LANCET of Dec. 3rd, who have not yet come into line with other more advanced bodies will do so ere long. When smoke from factory chimneys has ceased the domestic problem will have to be tackled and when it is considered that there are 600,000 kitchen chimneys in London, all of which might be made smokeless, it will be seen that the problem is not so insoluble as some think. Cook has no objection to smokeless cookery, it saves dirt and consequent trouble to her, and she is but human!

I am, Sirs, yours faithfully,

H. A. DES VŒUX,
Honorary Treasurer, Coal Smoke Abatement Society.

Buckingham-gate, S.W., Dec. 6th, 1904.

A CORRECTION.

To the Editors of THE LANCET.

SIRS,—In your otherwise accurate report of what I said in the debate on school certificates furnished by laymen (THE LANCET, report of the proceedings of the General Medical Council, Dec. 3rd, p. 1596) the final sentence, "He hoped ..... advice," has crept in by some accident. It would have been irrelevant to the question and would not agree with what I have elsewhere said in Council on the subject.

I am, Sirs, yours faithfully,

Dec. 3rd, 1904. P. H PYE-SMITH.

THE RESULTS OF COLECTOMY IN CARCINOMA OF THE COLON.

To the Editors of THE LANCET.

SIRS,—In Mr. A. W. Mayo Robson's interesting Bradshaw lecture reported in THE LANCET of Dec. 3rd, p. 1553, the results obtained by me in the treatment of carcinoma of the colon by colectomy are referred to in detail. It is stated quite correctly that I reported[1] seven colectomies for carcinoma without a death, but the other details given by Mr. Robson are curiously inaccurate. Not only are the intervals of time between operation and report wrongly given but recurrences of the disease unbeknown to myself are mentioned. By way of correction I give you the following extract from my paper[2]: "With the exception of the first patient on the list, who lived in complete comfort for four years and then died suddenly from heart disease, all the patients are alive and in good health at the present time and they have all put on flesh. All the patients have been examined recently and no evidences of recurrence can be detected either from the presence of symptoms or by physical examination of the abdomen. In three cases sufficient time has elapsed to give good grounds for hoping that the cure in them will be permanent. One case was operated upon over four years ago, another two and a half years ago, and the third two years and two months ago. The remaining three cases were operated upon too recently—nine, six, and two months ago—to warrant any prediction regarding ultimate prognosis."

Twelve months have elapsed since the paragraph just quoted was written and the six patients are still alive and well and free from any known recurrence. During these 12 months I have done two more colectomies for carcinoma of the colon. Both patients made normal recoveries and are now alive and well without recurrence.

I am, Sirs, yours faithfully,

Harley-street, W., Dec. 3rd, 1904. BILTON POLLARD.

[1] Brit. Med. Jour., Jan. 23rd, 1904, p. 175.
[2] Ibid., p. 181.

THE USE OF ALCOHOL IN THE TREATMENT OF ENTERIC FEVER.

To the Editors of THE LANCET.

SIRS,—A great change has occurred in recent years in our estimate of the value of alcohol in the treatment of the acute zymotics. In scarlet fever and small-pox, I believe, alcohol is now comparatively little used. Even in diphtheria, where the tendency to cardiac failure was supposed to be an indication for its routine use, it is much less used than formerly, and high authorities have confessed that they have largely lost faith in it. In no zymotic disease, however, did the position of alcohol appear to be more firmly established than in the case of enteric fever and in none perhaps was it more largely prescribed. But even in this disease expert opinion appears to be changing. Dr. F. Foord Caiger, medical superintendent of the South-Western Fever Hospital, in his very able Bradshaw Lecture on the Treatment of Enteric Fever,[1] says:—"I rank myself with those who hold that in most cases of enteric fever not only is alcohol not required, but that its employment is occasionally distinctly harmful even when given in quantities which would not be considered excessive." Dr. Caiger does not contend that in every case of enteric fever alcohol is useless, but I think it is evident he holds, as many of us do, that the value of alcohol in the treatment of this disease has been very much over-estimated and that it certainly ought not to be regarded as a "sheet anchor," to be freely prescribed as a routine measure in almost all severe cases of the disease.

In order to satisfy oneself of the special value of a new drug in the treatment of a disease it is desirable to treat a continuous series of cases with the drug. Similarly, in order properly to appreciate the supposed, but doubtful, value of an old drug it is desirable to treat a continuous series of cases entirely without it. I may therefore mention that in the isolation hospital of this town the practice of prescribing alcohol in enteric fever (or in any zymotic disease) has been entirely discontinued for the last three years, during which period over 100 cases have been treated. The numbers are, of course, too small for any argument to be based upon the case-mortality (which, however, has been below the figures that Dr. Caiger gives as the average for this disease), but speaking from our own experience we have seen no reason to return to the old practice. The history of medicine, unfortunately, abounds with instances in which individual drugs or therapeutic measures have acquired altogether false or at least greatly exaggerated reputations. In the true interests of the healing art it is obviously much to be desired that whenever this is the case we should learn to appreciate such drugs or measures at their true value. But in the case of alcohol there is an additional and all-important consideration which should make every medical man loth to prescribe it if he can possibly avoid doing so. I refer, of course, to the alcohol habit with all its attendant misery and degradation and to the undoubted encouragement which the medical prescription of alcohol gives to the self-prescription of it.

There are not many therapeutic indications to meet which the Pharmacopœia provides only a single remedy, and for any given purpose for which alcohol is usually prescribed—be it as stimulant, tonic, antipyretic or hypnotic—a little thought will generally enable some other and less objectionable drug to be substituted with equal if not better results.

I am, Sirs, yours faithfully,

C. KILLICK MILLARD,
Medical Officer of Health.

Leicester, Nov. 28th, 1904.

[1] THE LANCET, Nov. 26th, 1904, p. 1475.

THE TRAINING AND SUPPLY OF MIDWIVES.

To the Editors of THE LANCET.

SIRS,—Will you allow me to supplement your kind notice of the meeting held on Nov. 4th by the Association for Promoting the Training and Supply of Midwives, at which the chair was taken by the President, the Archbishop of Canterbury, by saying that the office of the Association is at Ducre House, New Tothill-street, Westminster, and that the secretary, Miss Gill, is there daily for interviews from 10.30 to one o'clock, Saturdays excepted? She will gladly give any information concerning the various branches of our work and the best means of meeting the requirements of the Midwives Act, and we specially want it to be known that we are ready to send speakers to any part of the country to address meetings on the subject.

May I quote, in conclusion, the eloquent words of Mrs. Humphry Ward in her speech at the meeting; as an appeal for the money we need to assist in the training of midwives, to supply the dearth that will become more and more evident as those who are incompetent retire from practice under the searchlight of the new regulations: "How many there are still, who, professing to know but knowing nothing, may at any time bring danger and death upon mother and child! How can we *bear* to think of a mother being injured in the hour of her trouble—that hour when all the community should be her guardians—when being unable to help herself she is ready to trust herself to hands unfit or inexperienced. Every woman of means who rejoices in her own children can help if she will. She can support this Association, she can give her yearly subscription, she can provide training for one woman, or more if her means are large. She can help women and children who are fighting the battle of life with hands no stronger than her own and with resources so pitifully less."

Subscriptions and donations will be very gratefully received at the office or by the honorary treasurer, Mr. Arthur L. Leon, L.C.C., 20, St. Thomas's Mansions, Westminster Bridge, or by myself (Mrs. Wallace Bruce, 9, Airlie-gardens, Campden-hill, W.).—I am, Sirs, yours faithfully,

AGNES MABEL BRUCE,
Chairman of the Executive Committee.

Nov. 28th, 1904.

THE WORLD'S FAIR AT ST LOUIS.

(FROM OUR SPECIAL SANITARY COMMISSIONER.)

(*Continued from p. 1529.*)

St. Louis, Nov. 15th.

IN the section devoted to the liberal arts the corporations of Liverpool, Manchester, Birmingham, Glasgow, and other towns show what they are doing in respect to drainage, the treatment of sewage, and the housing of the poor. The Indian Public Works Department also has many plans of weirs and irrigation works which have for their main purpose the forwarding of agricultural interests but likewise tend to improve the health of those who live in the better-drained districts. At the other end of the building the exhibits of the German Empire occupy extensive space and there are given most elaborate descriptive illustrations of what has been done. A great number of towns show on the walls maps of their sewers and sectional drawings and give other details. The whole plans with many details of application are given of the waterworks notably of Cologne, Dresden, Hanover, and Munich. Then there is the wonderful sanitary map of the German Empire which was exhibited in Paris in 1900. By the side of every town figures give the birth- and death-rate and the amount of litres of water supplied per head of the population, while special signs indicate the nature of the water-supply and the system of the drainage. Then there is a large case which contains drawings and photographs of the German sanatoriums for the treatment of tuberculosis. These are issued by the Board of Health of the German Empire. Most of the buildings are of the pavilion one-storey type but some have three and even four storeys. Broad verandahs and balconies abound, with room for the patients to lie in their beds while under shelter in the open air. The tops of the pine trees are seen above the roofs of these buildings and suggest a balsamic and perfumed atmosphere. Less odoriferous in their character are the sewer farms that abound in Germany, especially on the outskirts of Berlin. These are shown not merely by plans but by large models with little toy trees. The hydropathic resorts exhibit on a large scale, especially Bad Nauheim. We are shown also how patients, when gargling, are separated from each other by glass partitions and have enamelled basins breast high in front of them so as to avoid accidental infection due to splashing. But undoubtedly one of the most instructive and practical of the German exhibits, and one which occupies in the Education Section a large department all to itself, is that relating to the insurance of workmen. The Government has taken care that this should be as complete as possible. There is even a separate catalogue issued for this exhibit and a veteran German soldier is there all the time to give explanation and technical pamphlets, of which there are a large number translated into English and published especially for the St. Louis exhibition. Here are the statistics in regard to sickness, accidents, invalidism, or old age of the entire working population of Germany. What help the system of compulsory insurance gave in each case can be seen as well as how this most gigantic machinery or organisation has prevented pauperism and has helped to reduce the death-rate. There is probably nothing shown in the whole World's Fair that has had a greater and more practical effect.

The building devoted to Education and Social Economy also contains much that relates to the questions bearing on public health. One end of this structure is occupied by the extensive exhibits of the United States Department of Agriculture. It was by an Act of Congress dated July 2nd, 1862, that "colleges of agriculture and mechanic arts" were established. These institutions have received from the nation 11,322,000 acres for educational farming; in money $31,157,588 had been given; and more than 50,000 students have been enrolled. One large section of the exhibits of these schools is called the Dairy Laboratory and here much practical information can be obtained on the question of the preservation and sterilisation of milk. Thus, for instance, it has been demonstrated that to kill the germs of tuberculosis it is not necessary to sterilise milk at a higher temperature than 140° F. This, it is claimed, is of the greatest importance, for if the temperature is raised to 150° the galactase is lost and the milk becomes indigestible. Also it is not possible to make cheese with milk that has been heated up to 150°. But if the temperature has not exceeded 140° the cream will rise in the normal way. It is the agricultural school at Madison in Wisconsin that has made the most extensive experiments and researches on this subject. Its twentieth annual report gives details about the experiments. To sterilise the milk a rotary machine is necessary, otherwise the portion of the milk nearest to the source of heat would be overheated and that furthest from it would not be heated enough. Therefore a rotary movement to distribute the heat throughout the whole of the milk must be provided. When this was done it was found that from 98·9 to 99·8 per cent. of the bacteria were destroyed. At St. Louis, where sanitary conditions are far from perfect, there are about 3000 cows and the milk which they give is purer and better than the milk imported into the town from the healthier surrounding districts. This is simply due to the greater severity of the sanitary inspection organised within the confines of the town. Here, as in England, the problem presents itself as to how a town can control a milk-supply which for the most part is derived from districts far away from its jurisdiction. In these circumstances the suggestion is made that a regulation might be enforced to the effect that all milk imported from districts not controlled by the town inspectors must be pasteurised before it can be sold. It would then have the advantage of being not only safer but it could be kept for a much longer time. Apart from the question of sterilisation, one of the greatest necessities is to keep milk cool. At New York city the inspectors have the right to destroy all milk offered for sale at a temperature above 50° F. But the San Francisco authorities have hit on the best device. They simply put on a board the names of the dealers discovered selling milk of an inferior quality. These announcements are copied by the local newspapers and this terror of exposure has been found to be more effective than any number of laws and legal penalties.

Next to the Dairy Laboratory there is a model respiration

calorimeter for experiments with steers and other cattle. The object is to determine the income and outgoing of energy and matter from the body. Two cylinders of measured capacity form a pump and as they rise and fall they draw out the air in measured quantities from the carefully closed room or stable containing the animal. This pump works automatically. The air from each hundredth stroke of the measuring pump is delivered alternately in one of two pans. From the pans it is drawn through U tubes and also through a combustion furnace by an auxiliary air pump. In the U-shaped tubes the carbon dioxide and water of the air are absorbed and weighed. There is also a heated tube containing platinised kaolin which oxidises the combustible gases given off by the animal to carbon dioxide and water which are absorbed and weighed in the U tubes. The air admitted into the respiration chamber is likewise analysed. Elaborate methods of observation are devised so that what is occurring inside may be noted from the outside of the respiration chamber. The bullock, or whatever sort of animal it may be, is so dressed in waterproof bags that none of its dejections are lost nor can they fall on the floor. The animal itself is strapped up so that it cannot lie down. It must simply stand, eat, and breathe. The results show the total energy of food, the amount lost in various excreta, the energy due to oxidation of the tissues of the body, and the amount stored as increase of tissue. Remembering the debate in the Industrial Section of the Brussels International Congress of Hygiene on over-work, how over-work could be defined physiologically, and what its chemical effects were, I could not but wonder when elaborate experiments similar to the above would be made with that class of labourers who toil much in the same way as the beasts of burden. However this is one of the best corners of the World's Fair. It illustrates science applied to agriculture in all its branches and shows what is best in modern mechanical and scientific applications. There is no trickery here but an earnest effort to improve the world's food-supply. The section comprises, with agriculture, exhibits illustrative of civil engineering, much chemistry, and some bacteriology.

In this building a great number of universities have exhibits. The University of New York has a curiosity. This is an autotype copy of the portrait of Miss Dorothy Catherine Draper taken by her brother, J. W. Draper, M.D., LL.D., professor at this University. The portrait is now in the possession of Sir William James Herschel of England. It bears the date of 1840 and is stated to be the earliest photograph of a human face that exists in the world. There is also here the first public telegram which is dated Jan. 24th, 1838. 33 States of the United States and 14 nations have exhibits in this building. Eight of these American States send the exhibits from their boards of health. For instance, the State of Massachusetts illustrates the methods adopted for detecting colouring matter added to preserved articles of diet. There are many photographs in regard to sewage farms, drainage, and water-supply. New York has a fine compartment to itself which contains photographs of the city taken from the roof of the famous "skyscraper" building known as the "flat-iron," and intended to prove that the smoke nuisance has been considerably decreased. Then there are photographs of both clean and dirty cowsheds and of fever hospitals, and charts showing that in New York the annual deaths from diarrhœal disease have during the period from 1881 to 1903 decreased from 3·6 to 1·4 per 1000 of the population. Other charts indicate the great reduction in deaths from diphtheria since the use of antitoxic serum. The imposition of "quarantine" for measles has also given good results. This dates back to 1896. But the number of cases reported has not decreased—indeed, the highest figure was reached in April of this year; it is only the number of deaths due to measles that has been favourably affected.

Close to the New York section is a compartment reserved exclusively for a model of the Cameron septic tank, with which we are familiar as applied at Exeter and other places in England, for the purification of sewage by the self-destructive action of the bacteria which it contains. Here there are exhibited pictures and so on of the application of this system in various parts of America, where it was first installed at Glencoe, Illinois. Close by there are exhibits from different localities relating to the out-door treatment of tuberculosis and it must be confessed that some of the very small wooden huts deeply imbedded in the snow are not inviting. They cannot be properly ventilated and are likely to be too hot or too cold. The tent dwellings shown seemed to be preferable, especially those provided with double canvas roofs. Cuba and Japan have health exhibits here which stand side by side. The former naturally has much to demonstrate in regard to mosquitoes and the wire-netting and framework used for protection and observation. In this same building Mr. Charles Booth's celebrated social map of London is exhibited with many statistics and also a public-house and church map. The English universities have not any very large exhibits and but little that relates to public health questions. But the Germans are here again very prominent and are really marvellously systematic in their scientific exhibits. This is notably the case with their extensive display of scientific instruments. The prefecture of police and the administration for the relief of the poor in France also exhibit here. Then there are various French building societies which strive to provide the poor with cheap dwellings, together with every sort of charitable work to relieve distress and to combat alcoholism. All these things are very familiar to me, for I saw them in London at the Health Exhibition and have watched them grow in size while improving in quality from exhibition to exhibition. But of course the French exhibits at St. Louis cannot equal what they showed at their own incomparable exhibitions and notably at that of Paris in 1900.

Leaving the interior of the buildings and ascending towards the cascade the grandeur of the design gains upon the observer. It might be described as a design in water and whiteness. The waterfall is very fine and there is a lavish expenditure of water. Looking down from this eminence towards the principal avenue the buildings, with their colonnades, coated with cream white recalled somewhat the impression produced by the structures raised on the Place des Invalides in 1900. But the buildings lost somewhat in the appearance of size and majesty through the width of the space between them. They would have seemed bigger and more impressive if not so wide apart. On the other hand, when turning away from these main structures and looking in the other direction the amount of spare land was altogether an advantage. Here, in the dusk of the evening, I gazed down a bare, grass-covered hillside. Opposite, rising from the valley, stood forth the embattled walls which protected Jerusalem from the desecration of those who had not paid half a dollar for the right of entry. There were so few people about that the sight seemed very realistic. No other exhibition could have afforded the space to produce so natural an effect. Then from the vapour-veiled walls arose the piercing Arab music and the solitude invited a reverie of the far Orient. Lest, however, I should be accused of exaggerating the immensity of vacant space on the exhibition grounds I will quote the following passage from the World's Fair special correspondent to the *Chicago Record-Herald* published on Nov. 16th:—

> Two masked men held up and robbed the passengers and crew of a train on the miniature railroad at the fair Saturday night in true western style, securing money and valuables amounting to about $100, and then escaped. Of the three passengers one was a woman. The police say they have no clue to the robbers.

It is evident that if there was not a superabundance of room it would not be possible to stop and to rob even a miniature train without being seen. The music of the Orient penetrates not only in the solitudes near the canvas walls and plaster temples of Jerusalem. The Orient is very noisily represented at this exhibition. In the celebrated "Pike" I was agreeably surprised by the Cairo street, its size and many houses; a fairly good performance was given within but the Oriental dancing was quite as improper as anything seen in Paris.

But for downright wicked indecency it is only necessary to go next door. Here the offence is not only against propriety but against humanity. A syndicate, composed, it is stated, of a hardware dealer, a jeweller, a shoemaker, and a showman, has obtained a concession to run what they call a scientific institution! The show consists of baby incubators with living infants exposed in the most unsuitable surroundings. The air is drawn down a pipe from the back of the premises and forced into the incubators by a fan. At the air intake there are a railway line and a motor-car run, so that much dust is created. There is also a ladies' lavatory. Then come "the baby incubator café," a merry-go-round with its blaring machine organ, while on the other side of the incubators there are a large restaurant and the Cairo street. Opposite and around prevails the pandemonium for which the thoroughfare called the "Pike" has earned a world-wide

reputation. The spectacular side shows, all the noise, dissipation, and foolery of the World's Fair are concentrated here; and yet it is on this spot that public showmen, shouting through speaking-trumpets, profess to rear and to exhibit prematurely born infants. It is difficult to conceive a more flagrant and indecent prostitution of what pretends to be medical science. For the honour of America, be it said, the protests have been loud and fierce. Among the local press the *Censor* has week after week denounced this "death trap," this "angel-making mill," and in the issue of Sept. 22nd this paper published the statement that Attorney Rozier G. Meigs of the Humane Society had written to the president of the Exposition Company demanding the closure of this incubator show on the ground that since its opening 43 babies had been taken in and no less than 39 had died. The *New York Journal* stated that "it seemed undeniably true that the children taken to the incubators at the St. Louis Exposition are treated ignorantly and neglectfully." But then there is money in it. Half a dollar is charged for admittance and the daily receipts exceed $1000—indeed, they are stated to have amounted to $2700 on St. Louis day. To such low depths has a scientific matter been allowed to fall! The scandal has been so great that this much at least has been gained: few, if any, babies now taken are prematurely born, so the show has become a sham, and this is a little more humane. The *New York World*, the *Herald*, and the *Sun* have all published details about the "murder mill" of the fair, but it is still open and when I visited the establishment there were seven babies in the incubators, though they appeared to be fairly developed and not prematurely born. But it is shocking to think that even normal infants should be made the object of a show in the midst of a howling country fair such as the "Pike." Throughout, however, the great defect is the total lack of dignity. Any ignominious expedient, it does not matter how coarse, loud, vulgar, or ugly it is so long as it offers some prospect of bringing in a dollar or two, is unhesitatingly adopted. Visitors may be inconvenienced, the grandeur of the exhibition marred, the honour of the enterprise compromised, it does not matter so long as there "is money in it." This is all the more regrettable as there is at St. Louis the wherewithal to make a really grand and imposing exhibition.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

The Infirmary.

THOSE of the public who take an interest in the Manchester Infirmary are concerned and somewhat excited about the central provision for accidents and emergencies. At the trustees' meeting in July last the board accepted an addendum to the resolution approving of the plans of the new infirmary to the effect that it would consider and recommend to the trustees what it thought best upon the question of a central receiving house and out-patient department. In October last the committee recommended that there should be a central receiving house but no beds. Three of the six lay members (there were two medical members) dissented and proposed in a "minority" report that there should be at the receiving house a minimum of 12 beds and a maximum of 24. The medical staff are pretty unanimous against the beds, while some of the lay public are strongly in favour of them. The former may, without any undue flattery of the profession, be assumed to have more practical knowledge on the matter than the laity, but some of the latter are becoming somewhat animated in their style of argument and remind me of the young man to whom Dr. Johnson said, "Sir, you raise your voice when you should strengthen your argument." The question is to be brought before the trustees on Dec. 15th.

Country Schools for Town Children.

In July, 1903, in a letter to the *Manchester Guardian* the Rev. S. Nugent Perry, a Manchester clergyman, made some suggestions as to getting town children into the country without interfering with their education. Happily they did not fall to the ground but attracted the notice of Mr. Herbert Philips who consulted Mr. T. C. Horsfall and Mr. Wyatt, the director of elementary education in Manchester. With Mr. Perry's assent a letter was written to Mr. Levy, one of the Lewis trustees, by Mr. Philips, himself a co-trustee, the result being a grant of five acres of land near Mobberley at a "peppercorn rent" for a period of five years. Afterwards several members of the Manchester and Salford Sanitary Association united themselves with the others, the approval of the Board of Education was obtained, the support of the Manchester head teachers was received, and the scheme was started. A corrugated iron building with accommodation for 80 children (two classes) and two teachers was built and the school was opened in June last, when 40 boys from St. Mark's, Ancoats, began the experiment. After staying two weeks they were followed regularly by children from other schools. In its report the committee acknowledges its debt to Mr. Wyatt for his advice and help and says that his confidence in the value of the school has inspired it with hope that the small beginning may have a very useful influence on the system of primary education for the children not only of Manchester but of other large cities. There can be no doubt of the value of this experiment. The health of the children will be improved and to these town children the educational result will be a very considerable extension of practical knowledge of country life and may be looked on as the equivalent of foreign travel in the case of those more fortunately placed in the social scale. Their eyes will be opened to many things about which they are absolutely ignorant or of which their ideas are of the vaguest and perhaps it may prove one of the influences that may lead them, as the phrase goes, "back to the land."

Amalgamation of St. Mary's Hospital and the Manchester Southern Hospital.

The subscribers to St. Mary's Hospital and the Southern Hospital held meetings on Nov. 24th, at which the scheme for amalgamating the two institutions was approved. This will certainly prevent overlapping and may conduce to economy in working, which is unfortunately required by both. The new St. Mary's Hospital, as stated by the chairman, is "an ornament to the city and almost perfect in its arrangements and equipments." It is unfortunate, however, in its site, which is at one of the busiest points in the city abutting on the street, where the traffic is noisy and incessant, close to a busy railway station, and lying so low that perhaps it is more liable to fog than any position in the city. In a maternity hospital where, moreover, capital surgical operations are frequent, these conditions are, and will remain, undesirable. At the meeting of the friends of "the Southern," as it is usually called, the chairman stated that the negotiations had been conducted in a friendly manner, and that the result would be a great improvement in the work of the joint hospitals. The new Southern Hospital is to be built in High-street, Oxford-road, in close proximity to the new infirmary. The land is in possession, the plans are ready, and building will, it is hoped, be begun early next year. It will be used more especially for gynæcological and children's cases. Each hospital, as is usual, finds that the calls on it are constantly increasing and each asks for more money, it is to be hoped with success.

Dec. 7th.

WALES AND WESTERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENTS.)

Out-relief in Bristol and Cardiff.

THE Poor-law inspectors of the Local Government Board have recently been calling the attention of the Bristol and Cardiff boards of guardians to the large increase in the expenditure upon paupers in the two unions. Mr. E. B. Wethered told the Bristol board that during the year ending Lady-day, 1904, it had spent upon out-relief £39,555 compared with £38,113 during the previous 12 months. This increased expenditure, however, appears to have been more than met by a decrease in the cost of maintaining the indoor poor amounting to £2592. The cost per head of the census population for in-maintenance and out-relief during the last financial year was 3*s.* 11½*d.* and during the previous 12 months it was 4*s.* 0½*d.* Mr. F. T. Bircham reminded the Cardiff board that during the past ten years its expenditure had increased 63 per cent. while the actual increase in the number of paupers was 37 per cent. The population of the union during the same period had increased 30 per cent. and the rateable value 28 per cent.

Bristol Hospital Sunday Fund.

The annual report of the Bristol Hospital Sunday Fund which has recently been issued shows that £1727 were collected in January last in 392 places of worship in the city. This sum is an increase of £162 upon that collected in 1903 in 329 churches and chapels. At the annual meeting of the supporters of the fund the Lord Mayor stated that there was a distinct falling off in the contributions from the wealthier parts of the city and in asking for more generous support he pointed out that the annual expenses of the four largest hospitals of the city exceeded their income by over £7000.

Education of Epileptic Children.

The education committees of the city of Bristol and of the counties of Somerset and Gloucester have for some time had under consideration the provision of a school for the education of epileptic children. A further step in the direction of providing a joint institution has now been taken and a committee of the Bristol education authority has been asked to report upon some definite scheme. The cost of a school to accommodate 100 children is estimated at £6000 and the alternative suggestions are that it should be erected and maintained at the joint cost of the three authorities or that it should be erected by one authority and that the others should pay a proportionate sum for each child sent to the school.

Bristol Cottage Homes.

Although the Bristol board of guardians has not yet come to an agreement with the Local Government Board as to the best way to deal with the sick poor in the Bristol workhouses no charge of neglect can be brought against the guardians with respect to the treatment of the children under their care. The aim of the board has been to keep all children who were not mere infants away from the workhouses. There are with this end in view in various parts of the city 16 homes, each accommodating from 15 to 20 children, and in the country 150 more children are living in special homes. At the end of November Mr. Walter Long, the President of the Local Government Board, formally opened a group of cottage homes which have been erected on a site of 20 acres at Downend. These buildings include 14 semi-detached houses, a larger house for 36 convalescent children, a small detached hall, and a porter's lodge. Each of the 14 houses accommodates 12 children and contains on the ground floor a children's day room, a small sitting room for the foster-mother, a kitchen, and a scullery; and on the first-floor two bedrooms for the children placed one on either side of the foster-mother's bedroom, which is provided with observation windows, a small bedroom for isolation, a bathroom, and a lavatory. The cost of the undertaking is about £20,000.

Poor-law Administration in Exeter.

At a meeting of the Exeter court of guardians held on Nov. 29th it was decided that the parish of Exeter should be divided into two districts instead of three as at present and that Mr. E. A. Brush, L.R.C.P. Lond., M.R.C.S. Eng., and Mr. G. T. Clapp, M.B. Cantab., M.R.C.S. Eng., should be the respective medical officers at salaries of £90 per annum.

Dec. 5th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

The University of Glasgow: Installation of Chancellor.

THE Right Hon. Lord Kelvin was on Nov. 29th installed as Chancellor of the University of Glasgow in succession to the late Earl of Stair. The occasion was one which evoked great interest, not only on account of the elevation of his lordship by the unanimous vote of the general council to the highest official position in the University, but on account of the distinguished list of graduates who received at the hands of the new Chancellor the honorary degree of Doctor of Laws, among whom was the Princess Louise (Duchess of Argyll). Principal Story as Vice-Chancellor presided and among the distinguished people present were: His Grace the Duke of Argyll, Lord Blythswood, Lord Glasgow, Sir James King, Sir James Bell, Sir Henry Craik, Principal Sir William Turner, Mr. Robert Gourlay, LL.D., Hon. James Hozier, M.P., and Mr. Parker Smith, M.P., with others representing different universities and public bodies. After Principal Story had opened the proceedings by reading prayer in Latin Dr. Smith, on behalf of the business committee of the general council, intimated the unanimous appointment of Lord Kelvin as Chancellor of the University of Glasgow, whereupon Sir James King moved that his lordship be now installed in that high office. The Vice-Chancellor then administered the required oath and the Chancellor signed the book and having been invested with his official robes took the chair amid great applause. Professor Glaister as dean of the Faculty of Law then presented the recipients of the honorary degree of Doctor of Laws. These were: Her Royal Highness the Princess Louise, Duchess of Argyll, who had acted as President of the Association for the Promotion of the Higher Education of Women from the time of its foundation in 1877 until 1893, when Queen Margaret College became the women's department of the University and when the association therefore ceased to exist; the Marquess of Ailsa; James Thomson Bottomley, M.A., D.Sc., F.R.S., for 24 years associated with Lord Kelvin in the teaching of natural philosophy in the University of Glasgow, being for that period Arnott and Thomson Demonstrator; James Donaldson, LL.D., Vice-Chancellor and Principal of the University of St. Andrews; the Right Hon. Sir John Charles Dalrymple Hay, Bart., Privy Councillor, and Admiral of the Navy; the Very Rev. John Marshall Lang, D.D., Principal of the University of Aberdeen; Guglielmo Marconi, the distinguished inventor of wireless telegraphy; Andrew Graham Murray, Secretary for Scotland; the Hon. Charles Algernon Parsons, the inventor and perfector of the steam turbine; and Sir John Ure Primrose, Bart., Lord Provost of the city of Glasgow. Thereafter Lord Kelvin delivered his address which was largely reminiscent and dealt with the great advance in the working power of the University within recent years. The address was listened to with much interest by all. Principal Story then pronounced the benediction and the proceedings terminated.

Anderson's College Medical School

The Medico-Chirurgical Society of the College held its annual dinner in St. Enoch's Hotel on Dec. 1st. About 80 persons were present. Professor R. Fullarton, honorary president of the society, presided and Mr. Watch and Mr. Duthie acted as croupiers. Among those present were many of the governors, also Sir Hector C. Cameron and Professor J. Glaister of the University of Glasgow; Professor Henry E. Clark, President of the Faculty of Physicians and Surgeons; Professor A. Macphail of St. Mungo's College; and Professor J. H. Nicoll, Professor C. C. Douglas, Professor R. B. Ness, Professor G. B. Todd, and Dr. J. G. Connal of Anderson's College. The evening passed off very pleasantly with the usual toasts and many songs.

University of Aberdeen Medical Society.

At a meeting of the above society on Dec. 2nd, Dr. James Clark being in the chair, Dr. G. M. Duncan, assistant professor of pathology in the University, read an interesting lecture on Trypanosomial Diseases before a very large audience. Before proceeding to the subject in hand Dr. Duncan congratulated the society on its progress and in felicitous terms described the benefits accruing from the existence of such societies. He then dealt with the geographical distribution of trypanosomial diseases and described the symptoms caused in different animals by the various diseases as having a more or less close resemblance—localised patches of œdema, emaciation, drowsiness, and muscular weakness. Sleeping sickness was then referred to. It occurred in Western Africa, from Senegambia in the north to St. Paul de Loanda in the south, extending inland along the Senegal, Niger, and Congo rivers, and also near Lake Nyanza. A peculiar feature of the disease was the length of time during which it might remain latent—as long as seven years. The onset was very insidious and the symptoms resembled those that occurred in animals, the disease being mostly confined to negroes. Puffiness of the face, a sad, heavy expression, and sinking of the head on the chest were well marked. A parasite, the trypanosoma, had been found to be the cause of the disease and was apparently conveyed by the tsetse fly. Its inoculation in monkeys caused the same symptoms as in man. In the rat's blood a trypanosoma was commonly found in this country but caused no manifest symptoms though in considerable numbers. The symptoms varied according as the parasite was present in the blood only or in the cerebro-spinal fluid also; in the former case they were classed as trypanosoma fever and this was preliminary to the disease proper, the mental symptoms appearing only when the parasite occurred in the cerebro-spinal fluid as well. It was a very fatal disease and had decimated whole districts. Dr. Duncan next proceeded to discuss

some recent work regarding the relationship between trypanosoma and the Leishman bodies. The lecture was illustrated by numerous lantern slides which were much appreciated. The close attention accorded to Dr. Duncan and the hearty vote of thanks awarded to him on the motion of the chairman bore abundant testimony to the thorough grasp which the lecturer had of the subject and to the lucid and interesting manner in which he had handled it.

Death of Dr. E. B. Hector.

Dr. Edward Bateman Hector, Castle Douglas, died on Dec. 3rd. He had an extensive practice in Castle Douglas and district. He belonged to Montrose and came from a practice in Yorkshire to Castle Douglas six years ago. He took the degree of M.B., C.M. Edin. in 1883, and that of M.D. in 1902. Dr. Hector was a son of the late Mr. Alexander Hector, tacksman of salmon fishings at Bervie, and a younger brother of Mr. Alexander Hector who continued as lessee after his father's death. The deceased gentleman was about 50 years of age.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Hygiene in National Schools.

A DEPUTATION of representative members of the medical profession in Dublin was received on Nov. 11th by Dr. W. J. M. Starkie, Resident Commissioner of National Education. It included the President of the Royal College of Physicians of Ireland, the President of the Royal College of Surgeons in Ireland, the President of the Royal Academy of Medicine in Ireland, the President of the Leinster Division of the British Medical Association, the President of the Royal Veterinary College, and two members of the General Medical Council. Sir William Thomson said that they represented the signatories of a petition addressed to all the educational authorities of the United Kingdom urging the teaching of hygiene and temperance in primary and secondary schools, and he put before the Commissioner a short history of the origin and progress of this movement. He said that the immediate purpose they had in bringing this subject forward was to submit to the Commissioners whether it would not be possible to include in the public course of instruction in elementary schools lessons on the advantages of cleanliness, pure air, pure food, &c., and, moreover, to make this teaching compulsory. On the other hand, he thought that this was one of those subjects which might be taught without any following examination, the danger of over-weighting children in regard to examinations being obvious. Sir Christopher Nixon desired to emphasise two points in connexion with what had been said. The first was that elementary instruction in hygiene and temperance should be given at the earliest age, so that as the child commenced to learn the principles of the Christian religion he should also learn the principles of bodily health and that "cleanliness is next to godliness." He did not accept Sir William Thomson's view in not requiring an examination of an elementary kind in the subject of public health and considered that there was a necessity for providing a catechism of public health in order that the study of what was necessary for the body should be dealt with in the same way as that which concerned the child's spiritual well-being. Dr. Starkie delivered a long and interesting reply in which he said that he was thoroughly in favour of spreading as far as possible the knowledge of hygiene in the schools and stated definitely that in the preparation of a new edition of the programme he would advocate to his colleagues on the Board its being made a compulsory subject. He said that he considered examinations in such a subject as hygiene unnecessary. Mr. A. Chance, in returning thanks on behalf of the deputation to the Resident Commissioner for their very courteous reception, said that the reply which Dr. Starkie had made produced the impression on him that their efforts had not been entirely successful.

Royal College of Surgeons in Ireland.

A meeting of the council of the Royal College of Surgeons in Ireland decided on Dec. 1st, on the motion of Sir Charles Cameron, to confer the honorary Fellowship of the College on Dr. Anthony Traill as the first member of the medical profession occupying the distinguished position of Provost of Trinity College.

Rotunda Hospital, Dublin.

A meeting of the board of governors of the Rotunda Hospital took place on Dec. 2nd, Mr. R. O'Brien Furlong, C.B., being in the chair. A letter was received from Sir Arthur Macan thanking the board for his recent election as governor. The secretary reported the death since the last meeting of Dr. William C. Neville, pathologist to the hospital, an announcement which was received with much regret. The Master nominated Dr. Roy S. Dobbin as clinical clerk.

Dispensary Medical Officer's Fees.

A curious situation has arisen in Kilkeel, Co. Down, where, owing to an acute affection of the ear, one of the dispensary medical officers, Mr. H. E. Evans, applied to the board of guardians on Nov. 30th for leave of absence for three days to get further special advice. He nominated Dr. F. Floyd of Kilkeel as his substitute at four guineas per week. The guardians would only promise three guineas per week which Dr. Floyd declined, as the Irish Medical Association, of which he is a member, had fixed on four guineas as the sum binding on their members, and Dr. Floyd refused to take less. The board declined to appoint a substitute on the terms named, so Mr. Evans must remain and perhaps lose his hearing or, in case he leaves for further advice, the district may be left without the services of a medical man. Dr. Floyd generously offered to do duty for nothing but could not continue to do so in case of a longer absence than three days on Mr. Evans's part.

Lisburn Board of Guardians.

As a contrast to the action of the Kilkeel board of guardians it is pleasant to find the Lisburn board of guardians passing unanimously and cordially the following motion:—

That this board desire to express their admiration of the splendid services rendered by two of their medical officers, Dr. Orr of Ballyleeson and Dr. Mussen of Glenavy, who for 40 years have discharged their duties without a single complaint having been made against them, and further desire to express their thanks to these gentlemen for their kindness and attention to the poor amongst whom they are placed.

Visit of Lord and Lady Dudley to Ulster.

Their Excellencies the Lord Lieutenant and the Countess of Dudley arrived in Belfast on Dec. 5th and in the evening Lady Dudley distributed the prizes in the Ulster Hall to the pupils of the Municipal Technical College. On the 6th their Excellencies visited the People's Palace and the Countess of Dudley opened the Homes for the Cripple Children of Ireland. A cordial vote of thanks, moved by the Right Hon. Thomas Sinclair, D.L., and seconded by Professor J. W. Byers, M.D. R.U.I., was accorded to Lady Dudley. On the 7th their Excellencies visited Newry, where the Lord Lieutenant opened a bazaar for the Newry Fever Hospital and the Countess of Dudley was presented with an address from the Newry District Nursing Society.

The Belfast Workhouse.

At an extraordinary meeting of the Belfast board of guardians held on Dec. 1st special reference was made to the congested state of the workhouse and it was reported that in case the old Royal Hospital should still remain vacant it would be let to the guardians for the purpose of affording the necessary accommodation. The Local Government Board inspectors said that they never saw anything so bad as the present condition of the workhouse and stated that in the block where there were 700 infirm men the building was packed from the ground floor to the top loft and the smell was most offensive. It was utterly unfit for human beings to be placed in.

Health of Belfast.

At the monthly meeting of the city corporation held on Dec. 1st it was reported that the small-pox epidemic still continued, there having been five fresh cases during the previous week. The number of cases of infectious disease notified has increased, especially scarlet fever, of which 56 cases had been reported between Oct. 23rd and Nov. 19th, while during the same period 63 cases of enteric fever had been reported. The death-rate from all causes was 18·4 per 1000.

Ballymena Cottage Hospital.

At the annual meeting of the friends of this hospital on Dec. 1st special reference was made in the medical report to the loss sustained by the hospital in the death of the late Dr. J. Stuart. There had been 80 intern and 15 extern patients during the year. The income from all sources was

£524 and there was a balance, after paying all expenses, of £50.

Cork Hospital Saturday Fund and Hospital Aid Society.

At a meeting of the committee of the Cork Hospital Saturday Fund the following allocation was made:—North Infirmary, £80; South Infirmary, £80; Mercy Hospital, £45; Victoria Hospital, £36; Fever Hospital, £36; Eye, Ear, and Throat Hospital, £34; St. Patrick's Hospital, £36; Erinville Hospital, £21; and Cork Maternity, £12. On the same day the committee of the Hospital Aid Society distributed the following sums:—North Infirmary, £86; South Infirmary, £86; Mercy Hospital, £62; Victoria Hospital, £68; Eye, Ear, and Throat Hospital, £52; St. Patrick's Hospital, £33; Erinville Hospital, £33; Cork Fever Hospital, £20; Cork Maternity, £10; and Queenstown Hospital, £20.

Dec. 6th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Radio-active Bodies.

AT a recent meeting of the Academy of Sciences M. Tomasini made a very interesting communication. It is well known that one of the properties of the recently discovered emanations—namely, x rays, "n" rays, and the rays from radium—is their power of fixing themselves in bodies which are submitted to their action, which bodies themselves become a source of active radiations. They are only temporary sources of energy, for they rapidly lose their new property, the rate of loss depending on the nature of the body and the length of time during which it has been submitted to the radiation in question. Air, for example, inclosed in a vessel and submitted to the action of radium becomes radio-active for some hours after the radium has been removed. It is the same with water. M. Tomasini exposed various substances to the action of the x rays and has come to the conclusion that they thus become capable of giving off similar rays for a certain time afterwards in a gradually decreasing quantity. The intensity of the impregnation varies with the energy of the source of radiation and with the degree of ionisation of the body exposed to the rays. It next occurred to him that by charging with the x rays certain drugs intended to be decomposed within the body he would increase the facility of such decomposition and would make the action of the drug in question more active than usual by producing it in the nascent state. Iron, for example, would combine much more energetically with the red blood corpuscles than when given in the usual way. Here, then, is a new line in therapeutics which may not improbably give rise to interesting results.

Illness caused by Leeches.

At a recent meeting of the Hospitals Medical Society M. Mantel gave an account of an interesting case. A man, aged 34 years, who was in vigorous health went to Tunisia where he resided many months and where he drank the impure water of the country. After some time he began to spit blood every day and suffered from attacks of vomiting and melæna, at the same time becoming cachectic. Phthisis or malaria was suspected but auscultation revealed nothing wrong. Examination of the throat showed the presence of an expansile tumour and a second examination under a good light made it plain that this tumour was a leech, *hdella nilotica*. It was easily removed by forceps, all the symptoms cleared up, and the patient rapidly regained his strength.

Dec. 6th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

A New Medical Journal.

A NEW medical journal—the *Medicinische Klinik*—has just made its appearance in Berlin. The editorial committee includes 26 names, the great majority being those of professors at German and Swiss universities. The most widely known of these gentlemen are probably Professor Ehrlich of Frankfort, Professor von Leyden of Berlin, Professor Neisser of Breslau, Professor von Strümpell of Breslau, Professor Eichhorst of Zürich, Professor Gaffky of Berlin, Professor von Mering of Halle, and Professor Marchand of Leipsic. The acting editor is Privat-docent Dr. Brandenburg of Berlin. The first issue of the *Medicinische Klinik*, which is well printed on good paper, contains an article by Professor von Leyden on the organotherapy of Graves's disease. He commences by explaining that the function of the thyroid gland is to neutralise the toxic substances produced by metabolism. When this function is no longer performed, either on account of atrophy or on account of extirpation of the gland, the symptoms known as myxœdema develop, whilst a hyperplasia of the gland leads to an auto-intoxication in the form of Graves's disease. He then alludes to the experiments of Dr. Ballet and Dr. Enriques of Paris, of Dr. Burghard and Dr. Blumenthal of Berlin, and of Professor Lanz of Utrecht, proving that the blood serum of dogs deprived of the thyroid gland and of patients suffering from myxœdema has an antitoxic action against Graves's disease. Professor Lanz discovered that the same was the case with the milk of goats similarly treated and he accordingly prescribed their milk for patients suffering from Graves's disease. As certain patients disliked the milk because of its peculiar taste, Dr. Burghard and Dr. Blumenthal succeeded in separating the active substance which they termed "rodagen." Dr. Madsen of Copenhagen devised another method, in which the dried blood of goats deprived of the thyroid gland was employed, the blood being pulverised and administered in the form of tablets or pills. The results obtained by this preparation are said to be satisfactory. Professor Möbius of Halle has used the blood of wethers which had been deprived of the thyroid gland, giving it either by subcutaneous injection or by the mouth. Professor von Leyden states that he has used rodagen as well as the preparations of Professor Möbius and Dr. Madsen and found them all similarly efficacious. Rodagen being the preparation most easily obtainable in Germany is his favourite remedy. As a rule, an obvious improvement is obtained in from three to four weeks, though in severe cases the treatment may have to be continued for several months. The daily dose varies from three teaspoonfuls to four tablespoonfuls. Another interesting article in the *Medicinische Klinik* is contributed by Professor Bier of Bonn on the Treatment of Pseudarthrosis by Subcutaneous Injections of Blood. He has observed that when there is considerable hæmorrhage between the ends of a fractured bone it seems to have a good effect in promoting union, and copious hæmorrhage produces a voluminous callus. The importance of hæmorrhage for the formation of new bone is proved by the fact that complicated fractures and fractures where an operation is performed for the better coaptation of the displaced fragments unite much more slowly than other fractures because there is no hæmorrhage in these cases. He therefore attempted the treatment of pseudarthrosis by subcutaneous injections of blood and now gives details of three cases which came under his care from 13 to 14 months after the injury. From 15 to 25 cubic centimetres of defibrinated blood were repeatedly injected, the result being that a callus was formed after about four weeks and firm union was obtained within a relatively short time.

Dispensaries for Infants.

The protection of infant life is a subject now receiving much attention from the municipal authorities of Berlin, who have decided to establish dispensaries where the mothers of infants may obtain advice as to feeding them and may, if necessary, be supplied with milk and other food free of charge. Four such dispensaries have been already provided, the sum of 40,000 marks (£2000) having been granted for that purpose. It is expressly stated in the rules that food will not be supplied gratuitously for longer than a week except in the case of necessitous persons.

Rats on Shipboard.

When the British steamer *Blagdon*, loaded with wheat, arrived at Hamburg on Nov. 24th a great many rats were found among the cargo. The port medical officer, fearing the possibility that plague might exist among them, at once ordered that the cargo should remain on board and that the captain and crew should be conveyed to the isolation hospital of the port. Similar precautions were taken with regard to the crew of the Hamburg steamer *Hermia* to which some of the cargo had been transhipped. The dock labourers engaged in the unloading of the vessel were medically examined and both vessels were not only thoroughly disinfected but also

put into quarantine. No case of plague, however, has occurred and the microscopical examination of the rats has proved negative.

Dec. 5th.

NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

Chemicals in Imported Foods.

AT a meeting of the New York Academy of Medicine held on the evening of Nov. 17th the views expressed by Mr. H. W. Wiley, chief of the Bureau of Chemistry of the United States Department of Agriculture, were unanimously endorsed. Mr. Wiley, in an address on the Influence of Preservatives and Adulterants in Food on Public Health, condemned the existing methods and has written an order at the request of the Secretary of Agriculture to go into effect on Jan. 2nd, providing that all food products imported will be required to show on the labels of the original packages just what preservatives were used in preparing the food other than the accepted ones such as salt, sugar, vinegar, and wood smoke. In the course of his address Mr. Wiley said that there were conditions in which the use of preservatives of a chemical nature might be permissible, but he asserted that he could see none for a country like America where food is abundant and is procurable in its fresh state without difficulty. He thought that persons who preferred the preserved foods should have the right to procure and to consume them, but their sale to the general public to be eaten as wholesome and fresh goods he considered a direct fraud. Dr. G. L. Peabody, Health Commissioner Thomas Darlington, Dr. Rowland G. Freeman, and Dr. A. Jacobi concurred with Mr. Wiley's views, but the chairman, Dr. Andrew H. Smith, while agreeing with him, advised against precipitate action and said that he was inclined to believe that a judicious use of preservatives would be a measure of safety rather than of danger.

New York St. John's Guild.

The annual report of this society has recently been published. It states that during the past summer the floating hospital has carried 4916 babies, 15,443 children, and 7467 mothers, a total for the season of 27,826. The seaside hospital at New Dorp during the same period has accommodated 668 infants, 900 children, and 688 mothers, making a total of 2256. The disaster to the *General Slocum*, the pleasure steamer which was burned in New York Bay, with fearful loss of life, had the result of decreasing the number of persons carried on the daily trips of the floating hospital.

Impure Air of New York Subway.

Soon after the New York subway was opened complaints from passengers as to the impurity of the air therein began to pour in. The situation has since become more aggravated and the daily papers of New York are flooded with letters from suffering citizens. It was at first thought that the trains would act like pistons and suck pure air into the subway from the streets at the stations. Unfortunately, this theory has failed in practice and the agreement is general that the air in the New York subway is unpleasant if not dangerous. Various schemes of ventilation have been suggested, most of which are altogether impracticable. The *New York Times*, however, has proposed that conservatories should be started in the subway, so that the plants might take up the carbonic acid, separate the carbon equivalents therefrom, and liberate the oxygen. The process would probably be too slow for practical purposes and requires sunlight.

New French Hospital.

M. Jusserand, French Ambassador to the United States, and M. Henri Maillard, president of the French Benevolent Society, opened recently with becoming formalities the new buildings of the French Hospital on West Thirty-fourth-street, New York. The hospital has been under construction for two years, has cost $400,000 (£80,000), and is intended to accommodate 150 patients. The building is of seven storeys, of which two floors are occupied by private rooms and small wards. The remainder of the building contains the medical and surgical wards, the operating rooms, the pathological laboratory, and the quarters of the medical staff, while the top floor, which is completely isolated, contains wards for tuberculous patients.

Report of the Surgeon-General of the United States Army.

The report of the Surgeon-General of the United States Army for the fiscal year ending June 30th, 1904, has recently been issued. The admission-rate per 1000 of strength of the whole army for disease and injury during the past calendar year shows an improvement over that of 1902, the rates being 1451·13 and 1716·51 respectively. This reduction in the prevalence of disease and injury serves to further show the gradual improvement in the condition of the troops which has been noted since sanitary matters have been given the attention due to them. Notwithstanding the fact that a mean strength of 25,379 troops were on foreign service during the year, discharges for disability numbered but 1582, equivalent to a rate of 23·39 per 1000 men, while only 629 deaths were recorded, equal to a rate of 9·30 per 1000, as compared with 23·32 and 15·49, the corresponding rates for the previous year. While the rate of discharge for disability remained as high as last year the death-rate shows a decided improvement, being slightly more than half the rate of 1902. The number of cases and rates per 1000 of mean strength for disease in the army reported in the calendar year 1903 were as follows: admissions 83,096, rate 1228·45; discharges for disability 1462, rate 21·61; and deaths 475, rate 7·02. Those for external causes: admissions 15,063, rate 222·68; discharges for disability 120, rate 1·77; and deaths 154, rate 2·28. The admission-rate in the United States per 1000 for disease and injury was 1206·89 and death-rate 5·94, compared with 1343·77 and 7·83 in 1902. Of this rate 981·50 men per 1000 were admitted and 4·12 died from disease, and 245·39 were admitted and 1·82 died from external causes. The Pacific Islands and China furnished 44,767 admissions to sick report during the year, equivalent to a rate of 1879·54 per 1000 men, of which 53 were discharged on surgeon's certificate of disability and 375 died, giving rates of 2·23 and 15·74 respectively per 1000 of mean strength. From Cuba and Porto Rico 2384 admissions to sick report were reported, equivalent to a rate of 1527·23 per 1000 of mean strength, with rates of discharge for disability and death of 19·86 and 1·92 respectively. These figures show a most satisfactory condition from a health standpoint and demonstrate clearly the results of earnest efforts on the part of those in charge of sanitary affairs affecting the health of the troops. The rate of admission from disease was 1241·51, of discharge 19·22, and of death 1·28 per 1000 men serving in Cuba and Porto Rico, while corresponding rates for injuries were 285·72, 0·64, and 0·64 per 1000. The small amount of cholera in the Philippine Islands as compared with the previous year, says the report, speaks well for the untiring efforts of the army medical officers in preventing its spread among the troops serving at the island stations. The sanitary improvements in the conditions of the soldiers have gradually lessened the rates of sickness and mortality since the war, and although a large proportion of the troops have been on practically war service in the Philippine Islands since 1898, the rates of sickness and mortality for the calendar year 1903 more nearly approach those of 1897—when the low death-rate of 5·11 per 1000 of strength was recorded—than at any time since the outbreak of the Spanish-American war. Barracks and quarters in the United States are, generally speaking, satisfactory, and while the overcrowding reported last year has been lessened it will take time to construct new buildings and to make the necessary repairs to the old ones in order to obtain sanitary quarters from every standpoint and consequently diminished rates of sickness and mortality.

Prize Awarded at St. Louis to Dr. Simon Baruch of New York.

Dr. Simon Baruch, the well-known authority on baths in America and to whose propaganda and initiative are due the free baths of New York, has been awarded by the superior jury of awards of the Louisiana Purchase Exposition a silver medal for his exhibit, consisting of drawings, plans of construction, and explanatory texts and statistics showing the economic value of free cleansing baths, the cost of construction and maintenance, &c. The object of the exhibit was to impress upon municipal authorities the importance of providing for the poor means of personal cleanliness.

Nov. 28th.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having passed the necessary examinations and having conformed to the by-laws have been admitted Members of the College:—

Loris Arthur Arnould, Tom Bates, and John Arthur Bell, St. Bartholomew's Hospital; John Avery, London Hospital; William George Avis, University of Birmingham; John Herbert Bankes, St. George's Hospital; Henry Edward Barrett, St. Mary's Hospital; John Foster Beale, B.A. Camb., University of Cambridge and London Hospital; Arthur Reginald Beaumont and Arthur Morris Benett, Guy's Hospital; Charles Harold Berry and John Henry Douglas Bolton, University College Hospital; Antonio Blanc and John Harold Burridge, King's College Hospital; George Henry Boyden, University of Edinburgh, Owens College, Manchester, and St. Thomas's Hospital; Arthur Carnarvon Brown, St. Bartholomew's Hospital; Arthur Hill Burnett, University of Edinburgh and London Hospital; Geoffroy Carlisle, Guy's Hospital; Hubert Chitty, University College Hospital; Sidney Herbert Clarke, B.A.Camb., University of Cambridge and London Hospital; Alfred Philip Coker, L.S.A. Lond., Middlesex Hospital; John Cook, University College, Cardiff, and Guy's Hospital; David Kirkpatrick Coutts, St. Thomas's Hospital; Albert William Duncan Coventon, M.A., B.C. Camb., University of Cambridge and St Bartholomew's Hospital; George Frederick Dalton, M.D., C.M. Kingston, Kingston, Ontario, and Middlesex Hospital; Thomas Sidney Davies, University College, Bristol; Henry Roy Dean, University of Oxford and St. Thomas's Hospital; George De la Cour, University College Hospital; Clarence Hamul Denyer, Guy's Hospital; Fernand Louis De Verteuil, University of Edinburgh, St. Thomas's and King's College Hospitals; Charles Marshall Dickinson, London Hospital; George Reginald Ernst, M.D. Rush Medical College, Zürich and Berlin; George Jewel Evans, St. Mary's Hospital; Charles Roland Babington Eyres, St. Thomas's Hospital; Richard Felton, Guy's Hospital; Lionel Cecil Ferguson, St. Bartholomew's Hospital; Allan Rigden Finn, St. Mary's Hospital; William John Fordham, University College, Sheffield; Frank Forrest, University of Edinburgh and Victoria University, Manchester; Colin James Galbraith, King's College Hospital; Henry Hardwick-Smith, M.A. Camb., University of Cambridge and St. Bartholomew's Hospital; Alfred Ernest Underwood Hawkes, L.S.A. Lond., St. Mary's Hospital and University College, Liverpool; Edwin Claude Hayes, University of New Zealand and St. Bartholomew's Hospital; Samuel Clifford Hayman, University College, Bristol; Thomas Bonhôte Henderson, M.B., B.Ch. Oxon., University of Oxford and St. Thomas's Hospital; William Robert Higgins, University of Cambridge and London Hospital; Ludovic Hill, St. Mungo's College, Glasgow, and Middlesex Hospital; James Clarence Ledeatt Hingston, Middlesex Hospital; Reginald Felix Vere Hodge, B.A. Camb., University of Cambridge and St. George's Hospital; Augustine Henry Hudson, St. Thomas's Hospital; Charles Leonard Isaac, University of Cambridge and St. Mary's Hospital; Basil John Francis Jackson-Taylor, University College, Bristol, and King's College Hospitals; Frank Alexander Gallon Jeans, M.A. Camb., University of Cambridge and University College, Liverpool; Edwin Charles Johnston, Westminster Hospital; George Francis Jones, University College Hospital; Oswal Wynn Jones, University College, Liverpool; Arthur Edgar Kerr, University of Cambridge and St. Thomas's Hospital; Frederick Charles Rienzi Malins Knight, Albert Evelyn Fairfax Kynaston, and Arnold Leeming, Guy's Hospital; Ernest Browning Lathbury and Edward Leverton-Spry, St. Bartholomew's Hospital; George Laurence, University College, Liverpool, and St. George's Hospital; Walter Lister, University College, Leeds, and St. George's Hospital; Archibald Smith Littlejohns, University of Cambridge and Guy's Hospital; John Macarthur and Reginald Henry Miller, St. Mary's Hospital; John McCrae, B.A., M.B. Toronto, Universities of Toronto and Montreal; James Archibald McIlroy, University of Birmingham; William Thomas Pearse Meade-King, Guy's Hospital; William Mayhew Mollison, M.A., B.C. Camb., University of Cambridge and Guy's Hospital; William Parry Morgan, M.A. Camb., B.Sc. Lond., University of Cambridge, University College, Cardiff, and St. Mary's Hospital; John Findon Murphy and John Papa Nicolas, London Hospital; Andreas Neil, Ceylon Medical College, University College and Charing Cross Hospitals; Lionel Edward Close Norbury and Evan Williams Parry, St. Thomas's Hospital; Charles William O'Brien, St. Bartholomew's Hospital; Cadwallader Edwardes Palmer, B.A. Camb., University of Cambridge and St. Thomas's Hospital; Christopher Parker, L.R.C.S. & P. Edin., L.F.P.S. Glasg., Westminster Hospital; Ralph Newman Poignand, B.A. Camb., University of Cambridge and St. Thomas's Hospital; Laurence Edwin Price, University of Birmingham; Griffith Henry Rees and Frederick Rogerson, Guy's Hospital; Alexander Reute, University College, Liverpool; Henry Gates Sievwright, University College, Cardiff, and St. Mary's Hospital; James Donald Sinclair, University of Edinburgh; William Herbert Smailes, University of Leeds; George Renalds Southwick, M.D. Harvard, Harvard and Boston Universities; Maurice Spotswood, University of Liverpool; Claude Maberley Stevenson, Guy's Hospital; Henry Vernon Swindale, Middlesex Hospital; Alfred George Sworn, University College Hospital; William Arthur Tatchell and James Turtle, London Hospital; Richard James Campbell Thompson, St. Thomas's Hospital; Arthur William Wakefield, University of Cambridge and London Hospital; Theophilus Ralph Waltenburg, M.A. Oxon., B.A. Durh., L.S.A. Lond., Owens College, Manchester; Alfred Castle Warren and John Keith Willis, B.A. Camb., University of Cambridge and St. Bartholomew's Hospital; Richard Geoffery Williams, B.A. Camb., St. Bartholomew's Hospital; and Robert Alfred Worthington, University of Cambridge and London Hospital.

UNIVERSITY OF CAMBRIDGE.—Professor E. G. Browne, M.B., has been elected by the Indian Civil Service Board to represent it on the General Board of Studies.—Mr. F. F. Blackman, St. John's, has been elected Reader in Botany in succession to Mr. F. Darwin, M.B., F.R.S.—At a Congregation on Nov. 24th the following degrees were conferred:—

Bachelor of Medicine.—H. D. Hoffman, Trinity.
Bachelor of Medicine and Bachelor of Surgery.—S. Child, Pembroke; and S. Dodd, Caius.

At the Congregation on Dec. 3rd the following medical and surgical degrees were conferred:—

Bachelor of Medicine.—C. W. P. Moffatt, Clare; B. Ward, Clare; D. H. Fraser, Gonville and Caius; and J. Lambert, Downing.
Bachelor of Surgery.—C. W. P. Moffatt, Clare; and S. H. Nathan, Trinity.

Dr. D. MacAlister has been re-appointed a member of the General Board of Studies, the Special Board for Medicine, and the Board of Geographical Studies.—The Master of Downing (Dr. A. Hill) has been appointed a member of the Board of Agricultural Studies and Dr. B. Anningson a member of the State Medicine Syndicate. Professor R. Stockman of Glasgow has been appointed Examiner in Pharmacology in the place of Sir T. R. Fraser, who is unable to examine.—Professor E. Waymouth Reid, M.B., of Dundee, has been approved for the Sc.D. degree.—By the efforts of Professor G. Sims Woodhead a sum of £1600 has been collected in Huddersfield for the foundation of a lectureship in special pathology. The General Board recommends that the endowment be gratefully accepted by the University and that a "Huddersfield Lecturer" be appointed.

VACCINATION GRANT.—The Local Government Board vaccination grant has been awarded to Mr. John Campbell, L.R.C.P. & S. Irel., public vaccinator No. 3 District, Goole Union, Yorks.

A CASE of plague was discovered during the week in a steamer entering the Thames. The patient was immediately isolated.

UNIVERSITY OF BIRMINGHAM.—The annual dinner of the Medical Faculty of the University of Birmingham took place at the Grand Hotel, Birmingham, on Nov. 30th. The company numbered nearly 300 and the gathering was presided over by Dr. C. E. Purslow who was supported on his right by Sir Frederick Treves and on his left by the Chancellor of the University, the Right Hon. J. Chamberlain, M.P. A pleasant feature of the proceedings was the presentation to Professor B. C. A. Windle, the retiring dean of the Faculty who has just been appointed by favour of His Majesty to be President of Queen's College, Cork. Professor Windle went to Birmingham in 1882 and has held the position of dean for 15 years. Dr. Purslow said that as a professor of anatomy Professor Windle had proved himself a brilliant teacher, an admirable organiser, and a strict disciplinarian, as well as a true friend of the University. Sir Frederick Treves, after some humorous remarks regarding after-dinner speaking, made some interesting points in his speech. He said that a university to be a success at the present time must—on account of the enormous changes which had taken place in science—at least be young, and also that the theoretical value of Latin and Greek no one wished to discuss, but the thing of absolute, undoubted, practical importance was applied science. There was no kind of inducement offered for a man to follow into the career of science. This was a deplorable thing as in Germany it was encouraged in a very substantial manner. Mr. Chamberlain, in the course of a very humorous speech, said that he was afraid for all time to come probably science and the conferring of great benefits upon one's fellow creatures must be to a large extent its own reward. But the pursuit, the research, was an impossibility so long as the actual means of existence were wanting. Unfortunately they had far fewer pious benefactors in this country than they had in the United States of America. He also said, in discussing elementary and secondary education, that they were spending very little upon the highest education—a deficiency which still had to be supplied. Mr. Chamberlain concluded his observations on the subject by saying: "I do not perhaps share the opinions of some of my political friends and opponents, who seem to think that higher education would be a cure for everything—would be even a satisfactory specific for a 100 per cent. tariff; but I

do believe that it is one of the things which go to make the intellectual predominance and even the material position of a nation. I think it is a thing which we have too much neglected, and I hope that more attention will be paid to it in the future."

CENTRAL MIDWIVES BOARD.—The members of the Central Midwives Board met on Dec. 1st at 6, Suffolk-street, Strand, Dr. F. H. Champneys being in the chair. The first business for which the Board had been called together was to hear and to decide upon the charges of signing false certificates in connexion with examinations of the Obstetrical Society of London alleged against a certified midwife on the midwives' roll. A medical certificate was produced for the consideration of the Board stating that the midwife in question was suffering from a sharp attack of influenza and was quite unfit to leave her house, whereupon the case was postponed till January next. A communication was received from the Royal British Nurses' Association notifying that Mrs. Josephine Latter had been elected a member of the board in the place of Miss D. Oldham whose resignation was accepted at the last meeting of the Board. Dr. J. Ward Cousins informed the Board that he had been asked for an opinion concerning the notification by midwives of still-births and he stated that he would be glad to know how the matter stood. The Midwives Act, 1902, provided that the certificate under the Act shall not confer upon any woman any right or title to be registered under the Medical Acts or to assume any name, title, or designation implying that she is by law recognised as a medical practitioner or that she is authorised to grant any medical certificate or any certificate of death or of stillbirth. According to the rules framed by the Central Midwives Board under Section 31 of the Midwives Act, 1902, under the heading of "Notification" midwives must in all cases where a registered medical practitioner is not in attendance as soon as possible after the occurrence of a stillbirth notify the same to the local supervising authority. In the course of the discussion on the matter Dr. C. J. Cullingworth observed that anyone might give a certificate in regard to a stillbirth and the Midwives Act, 1902, had not altered that. The chairman then informed Dr. Ward Cousins that the following form of notification of the birth of a stillborn child for the use of midwives had been submitted by the Board to the Privy Council:—

To the Local Supervising Authority of *the Administrative County of ..... or *the County Borough of ..... or *the urban or rural district of .....

I, the undersigned, being a midwife holding the Certificate No. ..... of the Central Midwives Board, hereby notify that on the ..... day of ..... 19....., I delivered ..... living at ..... of a stillborn *male or *female child, no registered medical practitioner being in attendance.

Name of midwife .....
Address of midwife .....

* Strike out the words not applicable.

The Board adjourned to Dec. 22nd.

UNIVERSITY OF LONDON: FACULTY OF MEDICINE.—A meeting of the Faculty of Medicine was held at the University on Dec. 6th, Dr. J. Kingston Fowler, the Dean, being in the chair. On the motion of Mr. H. W. Page, seconded by Dr. W. Hale White, it was unanimously resolved:—

That a committee be appointed to consider and report to the Faculty as to the best means by which teaching and research in the advanced subjects of the medical curriculum can be promoted in the schools of the University by the action of the University.

The committee as constituted consists of the 34 members of the Faculty named below, representing the various schools of medicine of the University and the various subjects of study in the advanced curriculum. In the course of the discussion, which was carried on by Dr. W. P. Herringham, Sir Felix Semon, Dr. R. Percy Smith, and Dr. W. D. Halliburton, it was pointed out that the conclusions arrived at by the committee would have an important bearing on the future of medical teaching in London. In view of the large issues involved the Dean requested any member of the committee or of the Faculty who desired that any special point should be considered to communicate his wishes addressed to the honorary secretary of the Faculty of Medicine at the University. The members of the committee are as follows: Dr. J. K. Fowler, Mr. A. Pearce Gould, Dr. J. R. Bradford, Dr. Sidney H. C. Martin, Mr. W. Watson Cheyne, Dr. R. H. P. Crawfurd, Dr. Norman Moore, Dr. W. P. Herringham, Dr. G. Schorstein, Dr. W. Bulloch, Dr. W. Hale White, Dr. Lauriston E. Shaw, Mr. H. H. Clutton, Dr. H. G. Turney, Dr. H. D. Rolleston, Dr. A. C. Latham, Mr. H. W. Page, Dr. H. A. Caley, Mr. Stanley Boyd, Mr. H. F. Waterhouse, Dr. F. de Havilland Hall, Dr. E. P. Paton, Dr. Samuel West, Miss J. Cock, Sir Felix Semon, Sir Thomas Stevenson, Sir E. Cooper Perry, Dr. F. H. Champneys, Mr. A. H. Cheatle, Dr. R. Percy Smith, Dr. E. C Seaton, Dr. F. W. Mott, Mr. R. Marcus Gunn, and Mr. Morton A. Smale. The Faculty also considered the following report of the Board of Advanced Studies to the Senate—

At a meeting of the Board of Advanced Medical Studies, held on Nov. 21st, 1904, the following report on "tropical medicine" was adopted: (a) that tropical medicine should be introduced into the syllabus of subjects for the M.D. degree; (b) that "tropical medicine, (branch VI.)" be added to the list of subjects which may be taken for the M.D. degree; and (c) that, if (a) and (b) be adopted a report be presented on syllabus and course of study—

and resolved without dissent that the Faculty approves of the report of the Board of Advanced Studies on tropical medicine.

ERRATUM.—In THE LANCET of Dec. 3rd, p. 1619, under the heading University of London, in the list of honours for the M.B., B.S. examination, a * was inadvertently prefixed to the name George Johnson Langley, thus making him appear to have been "bracketed equal for the University Medal." This was not the case.

BOOKS, ETC., RECEIVED.

ALLEN, GEORGE, 156, Charing Cross-road, W.C.

The Art of Creation: Essays on the Self and its Powers. By Edward Carpenter, Author of "Towards Democracy," "Civilisation," &c. Price 5s. net.

BAILLIÈRE, TINDALL, AND COX, 8, Henrietta-street, Covent-garden, W.C.

Practical Manual of Diseases of Women and Uterine Therapeutics. For Students and Practitioners. By H. Macnaughton-Jones, M.D., M.Ch., Master of Obstetrics (Honoris Causa), Royal University of Ireland. Ninth edition. Price 21s. net.

Walsham's Handbook of Surgical Pathology. For the use of Students in Pathological Museums. Third edition, revised and largely rewritten by Herbert J. Paterson, M.A., M.B., B.C. Cantab., F.R.C.S. Eng., Assistant Surgeon to the London Temperance Hospital, Surgeon to Out-patients at the London Lock Hospital. Price 10s. 6d. net.

BLACK, ADAM AND CHARLES, Soho-square, London, W.

Familiar London. Painted by Rose Barton. Price 20s. net.

Who's Who, 1905. Price 7s. 6d. net. Who's Who Year-book, 1905. Price 1s. net.

The Englishwoman's Year-book and Directory, 1905. Seventh year of new issue. Twenty-fifth year. Edited by Emily Janes, Organising Secretary to the National Union of Women Workers of Great Britain and Ireland. Price 2s. 6d. net.

CASSELL AND COMPANY, LIMITED, London, Paris, New York, and Melbourne.

Under the Care of the Japanese War Office. By Ethel McCaul, R.R.C. With Illustrations from Photographs. Price 6s.

GRIFFIN, CHARLES, AND COMPANY, LIMITED, Exeter-street, Strand, W.C.

Year-book of the Scientific and Learned Societies of Great Britain and Ireland: a Record of the Work done in Science, Literature, and Art during the Session, 1903-1904, by numerous Societies and Government Institutions. Compiled from Official Sources. Twenty-first Annual Issue. 1904. Price not stated.

HIRSCHFELD BROTHERS, LIMITED, 13, Furnival-street, E.C.

Star Calendar for 1905. (Four sheets, each measuring 13 inches by 10 inches and each covering three months.) First year of issue. Price not stated.

HIRSCHWALD, AUGUST, Unter den Linden, 68, Berlin, N.W.

Erste Aerztliche Hülfe bei plötzlichen Erkrankungen und Unfällen. In Verbindung mit Wirkl.Geh.Rath Dr. E. v. Bergmann, Geh. Med.-Rath Dr. C. Gerhardt, Geh.Med.-Rath Dr. O. Liebreich, und Dr. A. Martin bearbeitet und herausgegeben von Prof. Dr. George Meyer, in Berlin. Zweite Auflage. Price M.8.

HODDER AND STOUGHTON, 27, Paternoster-row, E.C.

The Arris and Gale Lectures on the Neurology of Vision. By J. Herbert Parsons, B.S., D.Sc., F.R.C.S., Assistant Ophthalmic Surgeon, University College Hospital. Price 2s. 6d. net.

JOHN BALE, SONS, AND DANIELSSON, LIMITED, 83-91, Great Titchfield-street, Oxford-street, W.

Climate and Health in Hot Countries and the Outlines of Tropical Climatology. By Lieut.-Col. G. M. Giles, M.B., F.R.C.S., Indian Medical Service (Retd.). Price 7s. 6d. net. Part II. (Tropical Climatology) is published separately, price 5s. net.

KIMPTON, HENRY, 13, Furnival-street, Holborn, E.C.

Diseases of the Heart. A Clinical Text-book for the Use of Students and Practitioners of Medicine. By Edmund Henry Colbeck, B.A., M.D., B.C. Cantab., F.R.C.P. Lond., D.P.H. Cantab., Physician to Out-patients at the City of London Hospital for Diseases of the Chest, Victoria Park, E. Second edition, revised and enlarged. Price 7s. 6d. net.

LEWIS, H. K., 136, Gower-street, W.C.

Aequanimitas. With other Addresses to Medical Students, Nurses, and Practitioners of Medicine. By William Osler, M.D., F.R.S., Professor of Medicine, Johns Hopkins University, Baltimore. Price 7s. 6d.

Landmarks and Surface Markings of the Human Body. By Louis Bathe Rawling, M.B., B.C. Cantab., F.R.C.S. Eng., Senior Demonstrator of Anatomy, St. Bartholomew's Hospital. Price 5s. net.

Transactions of the Dermatological Society of Great Britain and Ireland. Edited by Arthur Shillitoe, F.R.C.S., and Wilfrid B. Warde, M.D. 1903-1904. Volume the Tenth. Price 5s. net.

LONGMANS, GREEN, AND CO., 39, Paternoster-row, E.C.

A Text-book of Medical Practice for Practitioners and Students. Edited by William Bain, M.D. Durh., M.R.C.P., Lond. Price 25s. net.

Transactions of the Clinical Society of London. Volume the Thirty-seventh. Price not stated.

MACMILLAN AND CO., LIMITED, London.

The Cambridge Natural History. Edited by S. F. Harmer, Sc.D., F.R.S., and A. E. Shipley, M.A., F.R.S. Vol. VII. Hemichordata, by S. F. Harmer, Sc.D., F.R.S. Ascidians and Amphioxus, by W. A. Herdman, D.Sc. Edin., F.R.S. Fishes (Exclusive of the Systematic Account of Teleostei), by T. W. Bridge, Sc.D., F.R.S. Fishes (Systematic Account of Teleostei), by G. A. Boulenger, F.R.S. Price 17s. net.

Life and Letters of Edward Byles Cowell, M.A., Hon. D.C.L. Oxon., Hon. LL.D. Edin., Professor of Sanskrit, Cambridge, 1867-1903. By George Cowell, F.R.C.S. Price 12s. 6d. net.

OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, 8, Hastings-street, Calcutta.

Scientific Memoirs by Officers of the Medical and Sanitary Departments of the Government of India. On a Parasite found in Persons Suffering from Enlargement of the Spleen in India. Second Report. By Lieut. S. R. Christophers, M.B., I.M.S. (On special duty.) New Series. No. 11. Price, Rupees 2, or 3s.

ORIENT PRESS, 26, Paternoster-square, E.C.

The Wisdom of the East Series. Edited by L. Cranmer-Byng and Dr. S. A. Kapadia. The Religion of the Koran. By Arthur N. Wollaston, C.I.E., Translator of the Anvar-i-Suhaili; Author of an English Persian Dictionary, &c. Price 1s. net.

REBMAN, LIMITED, 129, Shaftesbury-avenue, W.C.

Light Energy: its Physics, Physiological Action and Therapeutic Applications. By Margaret A. Cleaves, M.D., Fellow of the New York Academy of Medicine, Fellow of the American Electro-Therapeutic Association, Professor of Light Energy in the New York School of Physical Therapeutics. Price 21s. net.

An Atlas of Human Anatomy. For Students and Physicians. By Carl Toldt, M.D., Professor of Anatomy in the University of Vienna; assisted by Professor Alois Dalla Rosa, M.D. Translated from the Third German Edition and adapted to English and American and International Terminology by M. Eden Paul, M.D. Brux., M.R.C.S., L.R.C.P. Sixth Section: G. Neurology; H. The Organs of the Senses. Price 16s. 6d. net.

RUDALL, CARTE, AND CO., 23, Berners street, W.; and 7, Queen-street, Dublin.

The Professional Pocket-book, or Daily and Hourly Engagement Diary for 1905. Specially adapted for Professional Engagements. (Published according to the plan of the late Sir Julius Benedict.) Price not stated.

SAUNDERS, W. B. AND COMPANY, Philadelphia, New York, and London

An Introduction to Pharmacognosy. By Smith Ely Jelliffe, M.D., Ph.D., Professor of Pharmacognosy and Instructor in Materia Medica and Therapeutics in Columbia University (College of Physicians and Surgeons), New York. Price 10s. 6d. net.

Gall-stones and their Surgical Treatment. By B. G. A. Moynihan, M.S. Lond., F.R.C.S., Leeds. Price 17s. net.

THACKER, SPINK, AND CO., Calcutta.

Malarial Fevers and Malarial Parasites in India. By Major Andrew Buchanan, M.A., M.D., Indian Medical Service. Second edition. Enlarged. Price 6 Rupees.

UNIVERSITY PRESS, Cambridge (C. J. CLAY AND SONS, Ave Maria-lane, London).

Morphology and Anthropology: a Handbook for Students. By W. L. H. Duckworth, M.A., Fellow of Jesus College, Cambridge, University Lecturer in Physical Anthropology. Price 15s. net.

Studies from the Anthropological Laboratory, the Anatomy School, Cambridge. By W. L. H. Duckworth, M.A., Fellow of Jesus College, University Lecturer in Physical Anthropology. Price 10s. net.

WILEY, JOHN, AND SONS, New York (CHAPMAN AND HALL, LIMITED, London).

A Text-book of Physiological Chemistry. By Olof Hammarsten, Professor of Medical and Physiological Chemistry in the University of Upsala. Authorised Translation from the Author's Enlarged and Revised Fifth German Edition. By John A. Mandel, Sc.D., Professor of Chemistry and Physics and of Physiological Chemistry in the New York University and Bellevue Hospital Medical College. Fourth edition. First thousand. Price 17s. net.

WRIGHT, JOHN, AND CO., Bristol. (SIMPKIN, MARSHALL, HAMILTON, KENT, AND CO., LIMITED, London.)

Diseases of the Ear: For Practitioners and Students of Medicine. By James Kerr Love, M.D., Aural Surgeon, Glasgow Royal Infirmary; Lecturer in Aural Surgery, St. Mungo's College, Glasgow. (With 54 Stereoscopic Photographs and other Illustrations.) Price 25s. net.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, such information for gratuitous publication.*

ATKINSON, J., has been appointed Medical Officer and Public Vaccinator for the Lynton District of the Barnstaple Union.

BANNERMAN, WILLIAM, M.B., C.M. Edin., has been appointed Medical Officer and Public Vaccinator for the North District of the Cirencester Union.

BENNETT, H. S., M.R.C.S., L.R.C.P. Lond., has been appointed Resident House Surgeon at St. Thomas's Hospital.

BIRKS, G. T., M.B., B.C. Cantab., has been appointed Resident House Surgeon at St. Thomas's Hospital.

BIRT, A. C., M.R.C.S., L.R.C.P. Lond., has been appointed Resident House Surgeon at St. Thomas's Hospital.

BRADFORD, A. B., M.B., B.S. Durh., M.R.C.S., L.R.C.P. Lond., has been appointed Junior Ophthalmic House Surgeon at St. Thomas's Hospital.

BRODRIBB, F. A., M.R.C.S., L.R.C.P. Lond., has been appointed House Physician to Out-patients at St. Thomas's Hospital.

BULLEY, F. M., M.R.C.S., L.R.C.P. Lond., has been appointed to the Skin Department at St. Thomas's Hospital.

CARLÉ, FREDERICK C., M.B. Lond., M.R.C.S., has been appointed Senior Clinical Assistant to the Throat Hospital, Golden-square, W.

CARVER, N. C., B.C. Cantab., M.R.C.S., L.R.C.P. Lond., has been appointed Resident House Surgeon at St. Thomas's Hospital.

COUTTS, D. K., M.R.C.S., L.R.C.P. Lond., has been appointed to the Throat Department at St. Thomas's Hospital.

DAVIES, D. L., M.B., B.S. Lond., has been appointed Certifying Surgeon under the Factory Act for the Wisbech and Walsoken District of the counties of Cambridge and Norfolk.

DAY, LEIGH, M.B., B.Ch. Oxon., has been appointed Honorary Assistant Surgeon to the Essex and Colchester Hospital.

DELANY, K., L.R.C.P.I., L.R.C.S.I., has been appointed Certifying Surgeon under the Factory Act for the Carrick-on-Shannon District of the county of Leitrim.

DITTMAR, F., M.D. Glasg., D.P.H. Cantab., has been appointed Medical Inspector of the Local Government Board of Scotland.

EWART, R. W. T., M.B., C.M. Edin., has been appointed Clinical Assistant to the Chelsea Hospital for Women.

FARQUHARSON, J. MALCOLM, M.B., F.R.C.P. Edin., has been appointed Second Assistant Surgeon to the Ear, Nose, and Throat Department of the Royal Infirmary, Edinburgh.

FOOTNER, G. R., M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon to Out-patients at St. Thomas's Hospital.

GIBSON, A. G., M.B., B.Ch. Oxon., has been appointed Resident House Physician at St. Thomas's Hospital.

GRAY, R. E. G., M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon to Out-patients at St. Thomas's Hospital.

GUTHRIE, T., M.B., F.C. Cantab., M.R.C.S., L.R.C.P. Lond., has been appointed to the Ear Department at St. Thomas's Hospital.

HALL, DONALD G., M.A., M.D. Cantab., M.R.C.P. Lond., has been appointed Assistant Physician to the Sussex County Hospital, Brighton.

HARNETT, W. L., M.B., B.C. Cantab., M.R.C.S., L.R.C.P. Lond., has been appointed to the Skin Department at St. Thomas's Hospital.

HARVEY, FRANK, M.R.C.S., L.S.A., has been re-appointed Medical Officer of Health for the Padstow (Cornwall) Urban District.

HAWARD, W., M.B., B.S. Durh., M.R.C.S., L.R.C.P. Lond., has been appointed Resident House Physician at St. Thomas's Hospital.

HIGHAM, B., M.R.C.S., L.R.C.P. Lond., has been appointed Resident House Physician at St. Thomas's Hospital.

JONES, EDWARD T., M.R.C.S. Eng., has been appointed Medical Officer of Health of the Borough of Helston, Cornwall; Medical Officer to the Workhouse and to the No. 1 District; and Public Vaccinator.

KISCH, H. A., M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon to Out-patients at St. Thomas's Hospital.

MACLAREN, NORMAN, B.C. Cantab., F.R.C.S. Eng., has been appointed Assistant Surgeon to the Cumberland Infirmary.

NORBURY, L. E. C., M.R.C.S., L.R.C.P. Lond., has been appointed to the Ear Department at St. Thomas's Hospital.

PARRY, E. W., M.R.C.S., L.R.C.P. Lond., has been appointed Junior Obstetric House Physician at St. Thomas's Hospital.

PINCHES, H. I., M.B., B.C. Cantab., M.R.C.S., L.R.C.P. Lond., has been appointed Senior Obstetric House Physician at St. Thomas's Hospital.

ROGERS, J., L.R.C.S.I., L.R.Q.C.P.I., has been appointed Certifying Surgeon under the Factory Act for the Ballyfarnon District of the county of Sligo.

SEARS, C. N., M.B. Lond., M.R.C.S., L.R.C.P. Lond., has been appointed to the Throat Department at St. Thomas's Hospital.

SHAW, W. F., M.B., Ch.B. Vict., has been appointed House Surgeon and Resident Obstetric Assistant Surgeon to St. Mary's Hospital, Manchester.

STANNUS, H. S., M.B. Lond., M.R.C.S., L.R.C.P. Lond., has been appointed Senior Ophthalmic House Surgeon at St. Thomas's Hospital.

TAKAKI, K., M.R.C.S., L.R.C.P. Lond., has been appointed Resident House Physician at St. Thomas's Hospital.

TENCH, M., M.R.C.S., L.R.C.P. Lond., has been appointed Certifying Surgeon under the Factory Act for the Dunmow District of the county of Essex.

VAUGHAN, J. C. F. D., M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon to Out-patients at St. Thomas's Hospital.

WHITTING, R. B., M.B., B.C. Cantab., has been appointed House Physician to Out-patients at St. Thomas's Hospital.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

ARMY MEDICAL SERVICE, 68, Victoria-street, London, S.W.—Examination of Candidates for not less than 25 Commissions in the Royal Army Medical Corps.

BETHLEM HOSPITAL.—Two Resident House Physicians, unmarried, for six months. Honorarium at rate of £25 each per quarter, with board, residence, and washing.

BIRMINGHAM AND MIDLAND EAR AND THROAT HOSPITAL.—Assistant Surgeon.

BIRMINGHAM, JAFFRAY BRANCH OF THE GENERAL HOSPITAL, Gravelly-hill.—Resident Medical and Surgical Officer. Salary £150 per annum, with board, residence, and washing.

CARLISLE, CUMBERLAND AND WESTMORLAND ASYLUM, Garlands.—Junior Assistant Medical Officer. Salary £130 a year, rising to £150, with board, lodging, and washing.

CHICHESTER, WEST SUSSEX COUNTY ASYLUM, Graylingwell.—Junior Assistant Medical Officer, unmarried. Salary £150 per annum, with apartments, board, attendance, &c.

EXETER, ROYAL DEVON AND EXETER HOSPITAL.—Assistant House Surgeon, unmarried. Salary £60 per annum, with board, lodging, and washing.

GLOUCESTER GENERAL INFIRMARY AND THE GLOUCESTERSHIRE EYE INSTITUTION.—Assistant House Surgeoncy for six months. Salary at rate of £30 per annum, with board, residence, and washing.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Resident House Physicians for six months. Honorarium of £25.

HUDDERSFIELD INFIRMARY.—Junior House Surgeon. Salary £40 per annum, with board, residence, and washing.

LEEDS, HOSPITAL FOR WOMEN AND CHILDREN.—Resident House Surgeon for six months. Salary at rate of £80 per annum, with board.

LIVERPOOL, DAVID LEWIS NORTHERN HOSPITAL.—Two House Surgeons and a House Physician. Salary £60 each per annum, with residence and maintenance.

LONDON HOSPITAL MEDICAL COLLEGE.—Assistant Demonstrator of Anatomy. Salary £90 a year.

LONDON TEMPERANCE HOSPITAL.—Assistant Resident Medical Officer for six months. Honorarium at rate of 50 guineas per annum, with board, lodging, and washing.

MANCHESTER, HULME DISPENSARY, Dale-street.—Honorary Surgeon.

MANCHESTER, JEWISH HOSPITAL.—Resident Medical Officer. Salary commencing £80.

NEW HOSPITAL FOR WOMEN, 144, Euston-road, N.W.—Assistant Surgeon (female).

NEW ZEALAND, UNIVERSITY OF OTAGO.—Professor of Physiology. Salary £600, with fees.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney-road, Bethnal-green, E.—Pathologist and Bacteriologist. Salary £50 per annum, with lunch.

NOTTINGHAM GENERAL HOSPITAL.—Assistant House Physician. Also Assistant House Surgeon. Salary £100, with board, lodging, and washing in each case.

NOTTINGHAM WORKHOUSE INFIRMARY.—Junior Resident Medical Officer, unmarried. Salary £120 per annum, with apartments, board, washing, and attendance.

ROYAL COLLEGE OF PHYSICIANS, Pall Mall East, S.W.—Milroy Lecturer for 1906.

ROYAL EAR HOSPITAL, Dean-street, Soho, W.—House Surgeon, non-resident. Small honorarium.

ST. THOMAS'S HOSPITAL.—Resident Assistant Physician.

STOCKPORT INFIRMARY.—Junior Assistant House Surgeon for six months. Salary £40 per annum, with board, washing, and residence.

SWANSEA GENERAL AND EYE HOSPITAL.—House Physician. Salary £75, with board, apartments, washing, and attendance. Also Assistant House Surgeon. Salary £50 per annum, with board, apartments, washing, and attendance.

TOTTENHAM HOSPITAL, London, N.—Assistant Physician. Honorarium 20 guineas per annum. Also Honorary Anæsthetist and Honorary Radiographer.

WHITEHAVEN AND WEST CUMBERLAND INFIRMARY.—Resident House Surgeon. Salary £120, with board and lodging.

WOOLWICH INFIRMARY, Plumstead.—Assistant Medical Officer, unmarried. Salary £150 per annum, rising to £160, with apartments, rations, and washing.

THE Chief Inspector of Factories, Home Office, S.W., gives notice of vacancies for a Certifying Surgeon under the Factory Act at Halesowen, in the county of Worcester; and at Helston, in the county of Cornwall.

Births, Marriages, and Deaths.

BIRTHS.

MCNEIGHT.—On Dec. 5th, at St. John's-park, Blackheath, S.E., the wife of W. R. P. McNeight, M.A., M.D. T.C.D., of a daughter.

RICHARDS.—On Dec. 4th, at Croydon, the wife of J. Stewart Richards, M.D., B.S., of a daughter.

MARRIAGE.

GIRVAN—WOODS.—On Dec. 5th, at the parish church, Beccles, Suffolk, Alec Girvan, M.D., F.R.C.S. Edin., to Delia E. Woods, daughter of Alfred Woods, C.C., Beccles.

DEATH.

HALL.—On Nov. 29th, at 6, Navarino-road, Worthing, William Richards Hall, late Registrar Medical Society of London, in his sixty-third year.

Notes, Short Comments, and Answers to Correspondents.

THE "FOLLOW UP" ADVERTISEMENT.

A CORRESPONDENT has forwarded us a letter which she has received from the "Lady Manager" of the Espanola Medicine Company, *alia* our old acquaintance Pointing of "Anti-Dipso" fame. The Espanola Company sell a grease which is dignified by the name of Diano and which it is pretended will increase the size of the female bust. Our correspondent, whose sole address on Pointing's letter is the somewhat vague one of "London, W.," was apparently too sharp to be taken in by Pointing's specious statements, for she has received the usual "follow up" letter which is so characteristic of American quack advertising. This epistle would melt the heart of a stone. For sheer self-sacrifice and altruism we have rarely seen anything to come up to it. "Possessed as I am," says the lady manager, "of the means to make my sisters beautiful, to give them a new joy in life, my life's object is to fulfil my mission, and that I wish to do at all costs. ..... Therefore, upon coming across your inquiry the other day, I decided to have a consultation with our medical staff upon your case." The medical staff decided that our correspondent should be placed "on a footing with other women who have taken the treatment," and that it would be better even if the company lost money than that she should lose this opportunity—namely, of a "30-day half-price offer." Further, the lady manager says: "I know that it is difficult to believe that one is willing to work at a loss when necessary, but when it is a good work for the national welfare it is easier to comprehend." Insolent slush of this sort may deceive some persons, but we should very much like to know how any Government can allow such obvious swindles to be carried on without let or hindrance. We have already pointed out what an absolute fraud is Anti-Dipso and we say the same thing of Diano. No rubbing of grease or taking of "tonic tablets" will increase the size of the mammary glands, and despite all the testimonials and photographs showing the same we maintain that the whole thing is a swindle. Nor is it true that thin and flat-chested women are, to use Pointing's elegant phraseology, necessarily such as "have no life, spirit, or the real passion of true love; they lack vigour and have no vital force; they are weak and impotent and lack snap, fire, and vitality." If all unqualified practice is not to be stopped quacks of all kinds should at least be made to pay for a licence. As we have said over and over again, no one can sell tobacco without a licence, which does not in any way guarantee the purity of the article sold. Therefore, all quacks should be made to pay a heavy annual licence. Pointing can afford to pay £60 or £70 a month for a page advertisement in a certain magazine, therefore he should be made to pay an annual licence of at least £1000.

CIGARETTE PICTURES.

To the Editors of THE LANCET.

SIRS,—The juvenile cigarette smoker is catered for very generously, both physically and morally. The tobacco (?) cannot be good for his body and the accompanying picture can be still less good for his mind. I inclose a picture recently given to me by a friend who desired me to draw attention to the matter as publicly as possible. Surely it is scandalous that such things should be allowed. One hears a good deal about the unhealthiness of tobacco and its imitations for young people, but I think even they are less unhealthy than "photographs" such as the inclosed.

I am, Sirs, yours faithfully,

Nov. 28th, 1904. EAST LONDON PRACTITIONER.

*** Our correspondent inclosed a photograph which we quite agree with him is not good for the budding youth. It represents a woman with a bad figure who has apparently nothing on but a fan. The fan so as to be as much out of the way as possible is at the back of her head. We say that she has "apparently" nothing on because on a close inspection she seems to be clothed in skin tights but the photograph is obviously meant to give the idea of nudity and though we do not for a moment mean to say that studies from the nude are necessarily indecent, yet we are quite certain that the photograph in question is placed in the packet of cigarettes with a view to stimulating the sale by an appeal to the passions. We notice on the back of the photograph the following: "One of these photographs inclosed in every packet of 'Beauties' cigarettes. 56 different subjects." We inquired at some 16 East-end shops for these cigarettes but all the salesmen except one denied any knowledge of them and that one said he never had kept them and never would. So the evil is probably not very widespread.—ED. L.

VENTILATION OF RAILWAY TUNNELS.

AT the Engineering Congress held in connexion with the recent International Exhibition at St. Louis, U.S.A., Mr. Francis Fox, M.Inst.C.E., read a paper in which he mentioned that the use of a large ventilating fan in railway work was first applied in March, 1870, by Mr. Ramsbottom at the Lime-street tunnel of the London and North-Western Railway in Liverpool. The London *Engineer* of Nov. 25th in its summary of the proceedings states that Mr. Fox thought that if the Metropolitan and Metropolitan District railways of London were not about to be worked by electric traction it would

be absolutely necessary to apply mechanical power for putting the air of their tunnels into a satisfactory condition. "If railway engineers would adopt for tunnels the same rules as are applicable to mines much of the difficulty would disappear." The paper discussed the degree of atmospheric purity to be aimed at and described the ventilating methods of the Severn, the Mersey, and other tunnels, including the plan devised by M. Saccado—of the Italian railways—for utilising the fan on the injector principle. (The Saccado system of ventilation of railway tunnels was described at some length in THE LANCET of Feb. 27th, 1904, p. 592.) Mr. C. S. Churchill, chief engineer of the Norfolk and Western Railway, U.S.A., also read a paper on the same subject, describing American as well as European practice. He said that fans were used in several cases for city, mountain, and submarine tunnels. The Saccado system has been adopted at two points on the Norfolk and Western Railway, the fans being placed at the larger end of the injector nozzle which delivered air around the perimeter of the tunnel. This system has effected great improvements. The blast cleared the tunnel very quickly, eliminating the former discomforts and dangers to which the railway men were subjected and preventing the moisture which generally collected on the rails in tunnels. With the drier air the oxidation of the rails was reduced and on the walls there was little of the fungus growth which in a damp tunnel tended to cause decay or disintegration of the lining.

MR. ALABONE AND MR. STEAD.

ALTHOUGH the education of public opinion in the matter of false and misleading quack advertisements appears a well-nigh hopeless task we feel in duty bound to notice from time to time the most glaring instances of falsehood or deception. We know that our medical brethren in general practice are constantly being confronted with tales of marvellous cure cut out from some otherwise reputable lay journal, and asked by patients to explain, to controvert, or to allow an imitation of the treatment so luridly and incorrectly described. It may perhaps serve in such instances to be able to produce forthwith a paragraph or two under the ægis of THE LANCET and for this, if for no wider reason, we deal from time to time with the matter. The instance which concerns us now is the *Review of Reviews* and Mr. Alabone. Certainly the editor of the *Review of Reviews* has shown himself on so many occasions to be a person of such distorted mental vision that it might well be considered that any object thoroughly approved of by him would be thereby unworthy of the attention of sensible men and women. In the article we refer to upon "Dr." Alabone so many specific statements that are entirely untrue are made that it may, for the reasons above mentioned, be worth while briefly to dispute one or two of them. It is stated, for instance, that the Brompton Hospital refused to test Mr. Alabone's "cure." The fact is, that so far from refusing the Brompton Hospital actually offered to devote a ward to the genuine trial of the treatment; the offer was refused by Mr. Alabone on grounds which sufficiently showed the false nature of the claims that he makes. Again, so far is it from being true that the "cure" has been neglected by the medical profession, that two medical men of position—Dr. Arthur C. Latham and Dr. C. Slater of St. George's Hospital—carried out an investigation as to the nature of lachnanthes, the essential element in Mr. Alabone's "cure." Their results justify the slight value in which the medical profession hold this drug just as fully as Mr. Alabone's behaviour and that of his friends justify the removal of his name from the Medical Register and the small regard paid by medical men to his asserted achievements.

DELIVERY OF BREAD.

To the Editors of THE LANCET.

SIRS,—I have both in the medical and lay press for years advocated a more cleanly delivery of bread. Bread has to go through so many hands and these being working hands (even our servants) cannot always be clean. I have suggested that every loaf (or two loaves) should be placed in an oil paper bag and sealed up in the bakehouse; the bag need not be opened until it reaches the breakfast-table. I believe the cost would work out at a farthing, which most would only too gladly pay.

I am, Sirs, yours faithfully,

Manchester-square, W., Nov. 26th, 1904. THOMAS DUTTON.

NATURAL MUMMIES.

IN *Knowledge and Scientific News* for November there is an interesting article on the well-known preserved bodies found in certain tombs of the Church of Venzone in North Italy. In the course of one year or less, more certainly in two, says the writer, such bodies, clothed and placed in wooden coffins, are, as a rule, completely transformed and become dry and light and yellowish-grey in colour. The skin remains intact and resembles parchment; the bones are perfect, held in place by the dried ligaments and articular capsules, more or less covered with muscular and tendinous fibres which, with the nerves and blood-vessels, adhere together in a desiccated mass. Teeth, hair (beard, eyebrows, eyelashes), and nails are all preserved in astonishing perfection, the fluid parts of the body alone disappearing. When extracted from the tombs the mummies are covered with a layer of dark yellowish mould or fungus that disappears little by little, and the cutis, at first blackish and flexible, becomes a pale yellow, in colour and texture exactly like sheepskin. They are extremely light in weight, varying from three to six kilogrammes. It is notable that the phenomenon occurs not only in the parish church but also in the Chapel of St. Catherine, a little to the east of Venzone. At Ospedaletto, too, three miles nearer Gemona, five similar tombs are known to exist in the ancient Priory of the Santo Spirito. Such a phenomenon has naturally produced many theories but, so far as we know, no definite scientific explanation has been given. The writer points out that in 1829 Dr. Ciconi suggested that the desiccating agent might be calcium sulphate, which, in a more or less anhydrous form, and mixed with calcium carbonate, constitutes the soil of Venzone and Ospedaletto. As anhydrous sulphate of lime was the principal substance used by Hunter in his process for preserving the human dead body Dr. Ciconi suggested that the imperfect desiccation occurring in some of the tombs would be due to their having been excavated above or below the preservative layer. Marcolini in 1831, the writer continues, put forward a hypothesis that the acidification of the soil by hydro-carbo-phosphates might be the cause owing to which the natural processes of corruption were inhibited. Stringeri maintained the same idea a decade later. But Dr. Zecchini in 1861 and Dr. Paré (director of the Hospital at Udine) in 1868-70, independently brought forward the theory that the desiccation was produced by a parasitic mould. Other similar mummies have been found in the Cathedral of Toulouse, in the Church of St. Michael in Dublin, and in an ancient Servite Monastery near Bonn.

Duped.—If our correspondent's predecessor has removed outside the radius agreed upon we do not see that there is any remedy. Notices of removal frequently appear as advertisements and undoubtedly this form of publicity is occasionally abused. We doubt, however, if our correspondent can make out a case to which the General Medical Council would be likely to pay attention.

J. W. H.—There has certainly been no "honourable mention" of the appliances in question in our columns of recent years and we know nothing whatever of the methods of the firm. We have an idea that very many years ago they manufactured certain appliances in accordance with the instructions of medical men, and doubtless it was of these that we spoke.

A Welsh Medical Student makes no attempt to dispute the substantial accuracy of the statements on which our annotation was based nor does he provide us with any reason for changing our opinion that the good results which religion yields are likely to be intensified if the problems of life are handled in a sober and dignified fashion.

Fairplay.—It does not appear clear from the cutting inclosed whether the guardians are trying to exceed their powers or not. In any case their arrangements will require the sanction of the Local Government Board which can probably be trusted to see that the laws are observed.

C. E.—The condition is by no means an uncommon one and though a little obstinate usually yields completely to intelligent treatment. In this case our correspondent might well seek for his patient the assistance of a surgeon possessing special familiarity with such diseases.

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (12th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (9.30 A.M.), Royal Free (2 P.M.), Guy's (1.30 P.M.).

TUESDAY (13th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.), London Throat (9.30 A.M.), Royal Ear (3 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Throat, Golden-square (9.30 A.M.), Soho-square (2 P.M.), Chelsea (2 P.M.), Central London Throat and Ear (2 P.M.).

WEDNESDAY (14th).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing Cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. George's (Ophthalmic, 1 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (9.30 A.M.), Cancer (2 P.M.), Throat, Golden-square (9.30 A.M.), Guy's (1.30 P.M.).

THURSDAY (15th).—St. Barthol mew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing Cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (9.30 A.M.), St. Mark's (2 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Throat, Golden-square, (9.30 A.M.), Guy's (1.30 P.M.).

FRIDAY (16th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing Cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), Ophthalmic (10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (9.30 A.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Throat, Golden-square (9. 30 A.M.), City Orthopædic (2.30 P.M.), Soho-square (2 P.M.), Central London Throat and Ear (2 P.M.).

SATURDAY (17th).—Royal Free (9 A.M.), London (2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), University College (9.15 A.M.), Charing Cross (2 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), Throat, Golden-square (9.30 A.M.), Guy's (1.30 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

MONDAY (12th).—MEDICAL SOCIETY OF LONDON (11, Chandos-street, Cavendish-square, W.).—8.30 P.M. Papers:—Dr. E. R. Hunt: Subphrenic Abscess.—Mr. C. S. Wallis: The Surgical Treatment of Subphrenic Abscess.

TUESDAY (13th).—MEDICO-LEGAL SOCIETY (22, Albemarle-street, W.).—8 P.M. Exhibition of Four Medico-Legal Specimens: Dr. H. Littlejohn. Discussion on Degeneration: its Causes and Prevention—with reference to the proposed Sterilisation of Certain Degenerates (opened by Dr. R. Reutoul). Sir Wm. Collins, Karl Russell, Sir John MacDougall, Dr. J. Scott, Dr. F. J. Smith, and Sir R. Anderson will take part in the discussion.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY (20, Hanover-square, W.).—8.30 P.M. Adjourned Discussion on Chloroform Anæsthesia. Sir Victor Horsley, Col. Lawrie, I.M.S., Mr. A. W. Mayo Robson, Dr. Silk, Prof. Sherrington, Mr. A. M. Sheild, Dr. Waller, Dr. F. W. Hewitt, and others will take part in the discussion.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN (17, Bloomsbury-square, W.C.).—8 P.M. Address: Prof. R. T. Hewlett: Antitoxins. Mr. E. M. Holmes: Notes on some Recent Additions to the Museum.

WEDNESDAY (14th).—SOUTH-WEST LONDON MEDICAL SOCIETY (Bolingbroke Hospital, Wandsworth Common).—8.45 P.M. Paper:—Dr. S. Taylor: Errors of Treatment.

DERMATOLOGICAL SOCIETY OF LONDON (11, Chandos-street, Cavendish-square, W.).—5.15 P.M. Demonstration of Cases of Interest.

HUNTERIAN SOCIETY (London Institution, Finsbury-circus, E.C.).—8.30 P.M. Paper:—Dr. G. H. Herman: Leucorrhœa.

FRIDAY (16th).—SOCIETY FOR THE STUDY OF DISEASE IN CHILDREN (11, Chandos street, W.).—5.30 P.M. Discussion on Sudden and Unexpected Death in Children (opened by Dr. C. J. Macalister, Liverpool). Dr. J. P. Parkinson, Mr. J. W. Thomson Walker, Mr. A. H. Tubby, and Dr. J. Blumfeld will take part in the discussion.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY (12th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. J. M. H. Macleod: Clinique. (Skin.) 5.15 P.M. Dr. G. F. Still: Infantile Scurvy.

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—5 P.M. Mr. S. Edwards: Cancer of the Rectum.

TUESDAY (13th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. G. Rankin: Clinique. (Medical.) 5.15 P.M. Mr. A. Lane: Some Points in Abdominal Surgery.

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—5 P.M. Mr. C. Williams: High Frequency Currents.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Tottenham Hospital, N.).—4.30 P.M. Dr. R. M. Leslie: Principles of Prognosis.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Queen-square, Bloomsbury, W.C.).—3.30 P.M. Dr. Batten: Subacute Combined Degeneration of Cord.

GLASGOW OPHTHALMIC INSTITUTION (126, West Regent-street).—8 P.M. Demonstration of Ophthalmoscopic Cases, Stereoscopic and other Photographs, Pathological Specimens, and Microscopic Slides. The Ocular Symptoms of Value in the Localisation of Intracranial Disease. (Post-Graduate Course.)

WEDNESDAY (14th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. Q. Silcock: Clinique. (Surgical.) 5.15 P.M. Dr. L. Guthrie: Mental Overstrain in Childhood.

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—5 P.M. Mr. Dunn: Iritis: its Varieties and Treatment.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton).—4 P.M. Dr. J. J. Perkins: Foreign Body in the Bronchus, Diagnosis, Results, Treatment.

CENTRAL LONDON THROAT AND EAR HOSPITAL (Gray's Inn-road, W.C.).—5 P.M. Demonstration:—Dr. Abercrombie: Nose.

THURSDAY (15th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. Hutchinson: Clinique. (Surgical.) 5.15 P.M. Dr. L. Guthrie: Mental Overstrain in Childhood.

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—5 P.M. Mr. Baldwin: Practical Surgery.

SAMARITAN FREE HOSPITAL FOR WOMEN (Marylebone-road, N.W.).—3 P.M. Dr. Bell: Some Common Complications of Pregnancy.

MOUNT VERNON HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (7, Fitzroy-square, W.).—5 P.M. Lecture: Mr. H. Barwell: Laryngeal Tuberculosis: its Treatment and Prognosis (demonstration of cases). (Post-Graduate Course.)

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond-street, W.C.).—4 P.M. Lecture:—Dr. Poynton: Some Points in the Diagnosis of Scarlet Fever, Measles, and German Measles.

FRIDAY (16th).—POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—5 P.M. Dr. R. Jones: The Medical Treatment of Insanity.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Tottenham Hospital, N.).—4.30 P.M. Lecture-Demonstration:—Mr. de Prenderville: Anæsthetics.

EDITORIAL NOTICES.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this office.

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers—not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICES.

TO SUBSCRIBERS.

WILL Subscribers please note that only those subscriptions which are sent direct to the Proprietors of THE LANCET at their Offices, 423, Strand, W.C., are dealt with by them? Subscriptions paid to London or to local newsagents (with none of whom have the Proprietors any connexion whatever) do not reach THE LANCET Offices, and consequently inquiries concerning missing copies, &c., should be sent to the Agent to whom the subscription is paid, and *not* to THE LANCET Offices.

Subscribers, by sending their subscriptions direct to THE LANCET Offices, will ensure regularity in the despatch of their Journals and an earlier delivery than the majority of Agents are able to effect.

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SUBSCRIBERS ABROAD ARE PARTICULARLY REQUESTED TO NOTE THE RATES OF SUBSCRIPTIONS GIVEN ABOVE. It has come to the knowledge of the Manager that in some cases higher rates are being charged, on the plea that the heavy weight of THE LANCET necessitates additional postage above the ordinary rate allowed for in the terms of subscriptions. Any demand for increased rates, on this or on any other ground, should be resisted. The Proprietors of THE LANCET have for many years paid, and continue to pay, the whole of the heavy cost of postage on overweight foreign issues; and Agents are authorised to collect, and do so collect, from the Proprietors the cost of such extra postage.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Dec. 8th, 1904.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind	Rainfall.	Solar Radiation in Vacuo.	Maximum Temp. Shade.	Min Temp	Wet Bulb	Dry Bulb.	Remarks at 8.30 A.M.
Dec. 2	29·83	S.W.	...	59	52	48	45	47	Dull
,, 3	29·71	S.W.	0·04	54	48	44	44	44	Foggy
,, 4	29·76	S.W.	...	57	54	44	48	50	Dull
,, 5	29·63	S.W.	0·08	65	53	44	48	50	Dull
,, 6	29·48	S.W.	0·14	49	49	45	48	49	Raining
,, 7	29·28	W.	0·77	47	47	46	46	47	Foggy
,, 8	29·57	N.W.	0·02	46	40	36	36	37	Fine

During the week marked copies of the following newspapers have been received:—*Eastern Morning News, Sussex Daily News, Dublin Times, Birmingham Post, Surrey Advertiser, Notts Guardian, Dublin Express, Hereford Mercury, Sanitary Record, Local Government Chronicle, Mining Journal, Hertfordshire Mercury, The Scotsman, Evening News, Liverpool Mercury and Journal, Oban Times, Ilford Recorder, Daily News, Warminster and Westbury Journal, Westminster Gazette, Bolton Evening News, Times, &c.*

Communications, Letters, &c., have been received from—

A.—Messrs. W. and T. Avery, Birmingham; Apollinaris Co., Lond.; Aerators, Ltd., Lond.; Dr. C. Abrahams, Lond.

B.—Mr. Reginald Barratt, Lond.; Dr. F. G. Bushnell, Brighton; Sir Lauder Brunton, Lond.; Blackburn and District Medical Society, Librarian of; Mr. W. Bryce, Edinburgh; Dr. D. Bower, Bedford; Messrs. Bayliss, Jones, and Bayliss, Wolverhampton; Dr. G. D. Barton, Weybridge; Mr. G. P. Butcher, Plymouth; Burton-on-Trent Infirmary, Secretary of; The Bayer Co., Lond.; T. B. Browne, Ltd., Lond.; Messrs. Brown, Gore, and Co., Lond.; Birmingham General Hospital, Secretary of; Professor R. W. Boyce, Liverpool; Dr. F. L. Benham, Exeter; His Excellency the Brazilian Minister, Lond.

C.—Dr. C. Christy, Liverpool; Mr. Louis Carré, Lond.; Camwal, Ltd., Lond.; Cheltine Foods and Chocolate, Cheltenham; Messrs. F. Comar and Son, Lond.; Messrs. Cosenza and Co., Lond.; Messrs. T. Cook and Son, Lond.; Messrs. E. Cook and Co., Lond.; Messrs. W. and R. Chambers, Edinburgh; Messrs. A. Constable and Co., Lond.; Messrs. Cock, Russell, and Co., Lond.; Mr. A. Craig, Glasgow; Mr. S. W. Curl, Lond.; Chemists' Exhibition, Lond.; Messrs. T. Christy and Co., Lond.; Dr. W. B. Crowfoot, Beccles; Mr. A. G. Coke, Lond.

D.—Miss L. Denny, Nottingham; Dr. Leonard S. Dudgeon, Lond.; David Lewis Northern Hospital, Liverpool, Secretary of; Duryea Co., Coventry; Messrs. W. Dawson and Sons, Lond.; Right Hon. Earl of Dudley, Lond.; Mr. W. H. Duncan, Margate.

E.—Dr. R. J. Ewart, Rochdale; The Electrical Standardizing Co., Lond., Secretary of; *East London Observer*, Editor of.

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